DATA BOILER TECHNOLOGIES, LLC

BIG DATA | BIG PICTURE | BIG OPPORTUNITIES

We see big to continuously boil down the essential improvements until you achieve sustainable growth!

✉ info@databoiler.com https://www.databoiler.com

August 24, 2026

- via Regulations.gov for the CFTC (https://www.regulations.gov/document/CFTC-2026-1355-0001/comment and https://www.regulations.gov/document/CFTC-2026-1354-0001/comment)
- via Internet comment form for SEC (https://www.sec.gov/comments/s7-2026-21/joint-request-comment-further-definition-swap-security-based-swap-alternative-compliance and https://www.sec.gov/comments/s7-2026-22/joint-request-comment-swap-security-based-swap-data-reporting)

Mr. Christopher Kirkpatrick, Secretary
Commodity Futures Trading Commission (CFTC)
Three Lafayette Centre, 1155 21st Street NW,
Washington, DC 20581

Ms. Vanessa Countryman,
Secretary U.S. Securities and Exchange Commission (SEC)
100 F Street NE.,
Washington, DC 20549

Re: Joint Request for Comment on Further Definition of "Swap" and "Security-Based Swap" and on Alternative Compliance (CFTC: RIN 3038-AF71 / SEC: File No. S7-2026-21; Release No. 33-11424; 34-105735) [1]
+ Joint Request for Comment on Swap and Security-Based Swap Data Reporting (CFTC: RIN 3038-AF70 / SEC: File No. S7-2026-22; Release No. 34-105734) [2]

Dear Mr. Kirkpatrick and Ms. Countryman,

On behalf of Data Boiler Technologies, I am pleased to provide both the SEC and CFTC with our comments on the two joint request for comment (RFC) regarding further definition of "*Swap*" and "*Security-Based Swap*" (*SBS*) and on Alternative Compliance and the related Swap and SBS Data Reporting provisions. Data Boiler is a Pioneer in FinTech with patented inventions in signal processing, trade analytics, machine learning, time-lock cryptography, etc. We frequently comment on regulatory policy both domestically and abroad. Today marks our 13th year in business.

First, we strongly encourage both Commissions to review our following comment letters submitted earlier, which are directly relevant to this RFC and should be read in conjunction with our response here:

- Advance Notice of Proposed Rulemaking (ANPR) to regulate Prediction Markets – (CFTC RIN 3038-AF65) and Roundtable on Options Market Structure Reform (SEC File Number 4-887),[3] dated April 30, 2026
- Facilitate Innovation and Competition to Financial Products and Services for FinTech Firms, pursuant to Executive Order 14405 (CFTC RIN 3038-ZA24),[4] dated July 9, 2026
- Prediction Markets: Public Interest Determinations (RIN 3038-AF65),[5] dated July 27, 2026
- Data Reporting Requirements for Certain Event Contracts (RIN 3038-AF73),[6] dated July 31, 2026

We recognize that the SEC defines a *binary option* as a type of options contract with an *all-or-nothing* payout structure. The CFTC classifies *event contracts* (also called prediction or information contracts) as a category of ***derivatives***. There lacks a single, catch-all Federal definition of "***Prediction Market***." The Court of Appeals for the Third Circuit explicitly rule that **prediction market** event contracts are legally classified as "swaps" under the Commodity Exchange Act (CEA).[7] A

[1] https://www.regulations.gov/document/CFTC-2026-1355-0001 ; https://www.sec.gov/files/rules/other/2026/33-11424.pdf
[2] https://www.regulations.gov/document/CFTC-2026-1354-0001 ; https://www.sec.gov/files/rules/other/2026/34-105734.pdf
[3] https://www.databoiler.com/index_htm_files/DataBoiler%20CFTC%20SEC%2020260430.pdf
[4] https://www.databoiler.com/index_htm_files/DataBoiler%20CFTC%20FinTech%2020260709.pdf
[5] https://www.databoiler.com/index_htm_files/DataBoiler%20CFTC%20PMPublic%2020260727.pdf
[6] https://www.databoiler.com/index_htm_files/DataBoiler%20CFTC%20ReportEC%2020260731.pdf
[7] https://www.skadden.com/insights/publications/2026/04/third-circuit-affirms-kalshis-preliminary-injunction

"*mixed swap*" combines elements of both a swap and a security-based swap, such as a derivative tied simultaneously to a single stock's performance and a commodity rate. Because these instruments cross statutory lines, the CFTC and SEC act as joint primary regulators with concurrent anti-fraud authority. Both Commissions have explicitly stated that this category is – and is intended to remain – narrow. The foundational framework governing these instruments was established in the 2012 Product Definitions Adopting Release (77 Fed. Reg. 48208), the very baseline this Joint RFC now revisits.

Please see the BOX below for an **Executive Summary** of our comments:

I. The Challenge of Balancing Market Integrity and FinTech Innovation to advance US Competitiveness

This joint RFC determines whether certain event contracts are swaps, Security-Based Swap (SBS), or mixed swaps, dictating if they trigger Title VII clearing, margin, and prudential oversight alongside FSOC members. While prudential regulators require comprehensive risk-tracking tools to safeguard financial stability, a Title VII classification introduces a much heavier compliance burden for markets and participants.

- **Operational Friction:** Mapping a $1 retail contract into legacy Swap Data Repository (SDR) or SBSDR fields via slow, XML-based protocols creates an expensive data-processing tax.
- **The SEC Overextension:** The SEC's "*Event Contract Prong*" errantly treats raw operational facts (e.g., factory counts or emissions) as security-based variables.
- **Cause vs. Effect:** Real-world operational inputs are broad economic commodity "**causes**," not security-based valuational "**effects**".

II. The Exposure to Cause versus Effect (E2CvE) Framework

To eliminate duplicate policing, risk must be categorized by its true economic nature using three structural filters:

- **The Operational Sorter (Settlement Mechanism Test):** Evaluates settlement data sources. Contracts settling against raw, non-valuational facts are CFTC commodity swaps, while those settling against market appraisals are SEC SBS.
- **The Legal Filter (Insulated Valuation Test):** Requires the contract payout to be mathematically dependent on capital-market appraisals (e.g., stock tickers) to trigger SEC oversight.
- **The Structural Gate (Operational Intent Test):** (i) Trading venues with high-velocity bots generate a volatile "*Valuation Mirage*," requiring SEC oversight. (ii) Pre-funded architectures function as passive parametric insurance pools under lean CFTC rules → i.e., Routes products by operational vehicle.

Policy Makers should amend 7 U.S.C. § 1a(47)(B) by striking clause (v) and inserting a statutory Two-Part Bright-Line Test.

III. The Enhanced Fiduciary CPO-Matchmaker Model

Since the US cannot simply adopt the EU/UK's MTF model because of the CEA mandate to preserve the default waterfall model, policymakers should consider establishing a Safe Harbor to exempt 100% pre-funded CPO-Matchmaker model from traditional mutualized banking default funds – replacing manual paperwork with rigorous mathematical code audits of underlying smart contracts, liquidation scripts, and oracle price feeds to defend against flash-loan vulnerabilities.

We urge the Commissions to utilize their general exemptive and joint rulemaking authority under §4(c) of the CEA and §§13(n), 15F, and 36 of the SEA of 1934 to codify an alternative compliance pathway:

- **Absolute Asset Isolation:** Every account functions as an independent, legally segregated "series cell" under CFTC Rule 4.20, meaning assets and wagers cannot touch or cross-collateralize.
- **Double-Layered Fiduciary Protection:** Operators owe a federal fiduciary duty under Part 4 of the CEA alongside state-level corporate duties, strictly protecting participants from the conflicts native to exchange architectures.
- **Tax Simplification:** Bypasses K-1 routing to automate earnings reporting via standard Form 1099-B templates.

IV. Structural Mechanics and Eliminating Systemic Risk

The CPO model registers a net-zero risk signature across the four core-metrics of prudential oversight:

- **Eliminating Systemic Credit Risk:** Leverage is programmatically impossible because contracts require 100% upfront pre-funding, rendering mutualized banking default funds obsolete.
- **Eradicating the "Valuation Mirage" via Anti-Bot Policies:** Direct Retail Clearing models are vulnerable to secret internal affiliate algorithmic trading bots that fabricate activity and widen spreads. The Enhanced CPO model mandates a ban on affiliate algorithmic bots to eliminate artificial volume noise and anchor price discovery to objective third-party oracles.
- **Orderly Wind-Down & Asset Isolation:** Client assets sit in a distinct trust separate from the operator's capital, isolating cash from corporate creditors if the startup goes bankrupt.

V. Streamlined Split-Ingestion Data Reporting

To satisfy the data harmonization goals of File No. S7-2026-22, we propose a three-module reporting architecture built on cloud-native web protocols:

- **Module 1 – The Transactional and Identity Layer (Split Model):** Decouples market data from identities. Track 1 streams anonymous transaction tapes via compressed JSON payloads over a read-only WebSockets connection. Track 2 keeps customer identity data localized. Regulators pull identity packages via an Electronic Blue Sheet (EBS) gateway only when surveillance nodes flag an anomaly.
- **Module 2 – Daily Solvency Verification:** Solvency reporting completely bypasses platform metrics. An independent custodian bank pushes daily cash logs to the NFA WinJammer Portal via automated APIs.
- **Module 3 – Streamlined Compression Reporting:** Net-risk summary logs are pushed every 1 to 5 minutes to an SDR event bucket, cutting gross exposure logs by over 90% and clearing out blank fields.

VI. Concerted Surveillance and the Whistleblower Analogy

We strongly oppose the current CFTC proposal to force exchanges to independently gather employee and occupation data under §16.03(g), as it breaks the dual-tier architecture established under CFTC Rule 166.3 and Part 38 Core Principles. Alternative compliance oversight should update CFTC §40.11 and Part 38 to mandate a tiered surveillance architecture that establishes a concerted coordination framework between execution venues and client-facing brokers. Instead of relying on generic "*data-in-motion*" transfers under Part 16 – which create data granularity deficits and vulnerable cybersecurity honeypots – platforms should use a pull-based model under CFTC Rule 38.254. Under this framework, the exchange operates a Tier 1 Agentic AI layer to monitor anonymous trade data for anomalies, while client-facing brokers maintain a Tier 2 Audit Trail Hub semantic database to house customer identities and KYC/AML records under Part 1 rules.

This tiered architecture allows exchanges to summon localized participant identities and secure business communications when a Tier 1 automated surveillance node flags a specific symptom of market abuse. To comply with SEC Rule 17a-4 and FINRA Rule 3110 while permitting BYOD cell phone use, broker-dealers use containerized work apps or eSIM carrier mirroring to isolate and record business data without violating privacy. This precision framework allows regulators to look beyond legacy volume metrics and deploy forensic simulation back-testing to reconstruct trade sequences, evaluate market-maker alignment, and flag onset signals of manipulation across interconnected networks.

Finally, policymakers can evaluate these cross-market mechanics through the lens of corporate whistleblower programs, as both frameworks leverage frontline intelligence to reduce data asymmetry and expose hidden malfeasance. To resolve the "*Insider Information Paradox*" and prevent incentivized sabotage, the alternative compliance regime must enforce an "*Enforcement Safe Harbor*". This policy permits expertise-driven analysis of fragmented public data, but legally bars corporate insiders from betting against their employers on prediction markets. Instead, it mandates that insiders would route sensitive tips through formal SEC and CFTC whistleblower channels, channeling true information into structured legal remedies rather than chaotic, anonymous market sell-offs.

Table of Contents

Executive Summary 2

Contexts of the Problem 6

The Murky Water and Principle to Segregate Cause versus Effect 7

The Functional Separation: Cause versus Effect 8

1. CFTC Jurisdiction: Exposure to Cause (Structural & Operational Risk) 8
2. SEC Jurisdiction: Exposure to Effect (Valuational Risk) 8

Mixed Swap: Structured Notes, Narrow-based Security Indexes, Credit Default Swap 9

(a) The Operational Sorter: The Settlement Mechanism Test 10

(b) The Legal Filter: The Insulated Valuation Test 10

(c) The Structural Gate: The Operational Intent Test and a Fiduciary Passport for Gray Areas 10

Recommended Statutory Amendments to CEA Section 1a(47)(B) 11

Vertical Integration, FSOC Concerns, and NOT following the Europe MTF model 12

Architectural Safeguard: The Fiduciary CPO-Matchmaker Model 13

Why Prediction Markets Function Like Insurance 13

Why Traditional Exchange concepts do NOT translate cleanly to binary prediction markets 15

The Strategic Incentive Impasse 16

The Legal Re-Engineering: A “Micro-Exchange” Safe Harbor 17

Bypassing the Banking Funds via “CPO Accounts” 17

Overcoming the Retail Marketing Hurdle 17

The DCM Market Integrity Failure (The Whelan Paper & AMM Exploits) 18

Why a CPO’s Fiduciary Framework Wins 18

Recommended Amendments to CFTC Parts 4, 38, and 39 19

Part 39 (Clearing) must be Amended 19

Required Changes to Part 4 (CPO Rules) 19

Required Changes to Part 38 (Exchange Rules) 19

Portfolio Compression: Risk Transformation or Risk Management 20

Full collateralization acts as an absolute circuit-breaker against systemic default 21

Why the CPO Fiduciary Model Exposes This Fraud Faster Than a DCM 21

CPO Market Architecture Protections against circular loop 22

Data Reporting Requirements 23

CPO Data Reporting Requirements 24

Recommended 3-Layers Approach: 25

Transactional logs, beneficial ownership data, and portfolio compression histories sent to an SDR 25

The Financial Audit Path: The National Futures Association (NFA) 25

The Front-Line Layer: Real-Time Public Disclosure Feed 26

Further strengthening market integrity and enhancing regulatory oversight with a bot-free, 100% pre-funded, fiduciary-backed CPO prediction market model 26

Module 1: Splitting the Transactional and Identity Layer for Privacy Protection 26

Module 2: Cryptographic Proof-of-Reserves (The Escrow Balance) 27

Module 3: Portfolio Compression Summaries (Ledger Integrity) 27

Overcoming Prudential Regulators' Concerns 27

Operational Efficiency without the IRS K-1 Tax Bottleneck 28

Macro-Prudential Alignment and Market Monitoring 29

COMPLIANCE – Collective Efforts 31

CAPITULATION – Unwavering recognition of higher authorities 35

Key Response to Questions 37

ANNEX 1 – Data Boiler's response to specific questions about Further Definition of "Swap" and "Security-Based Swap" and on Alternative Compliance 39

Part II — Definitional Clarity (Questions 1–11) 39

Part III — Alternative Compliance (Questions 12–15) 45

ANNEX 2 – Data Boiler's response to specific questions about Swap and Security-Based Swap Data Reporting 49

Harmonization Across Frameworks 49

Transparency and Data Quality 51

Operational Complexity 55

Standardized Identifiers and Reference Data 58

Implementation Considerations 60

Contexts of the Problem

The economic behaviors of prediction markets are NOT necessarily akin to Dodd-Frank **Title VII** swap definition. Instead of predominantly negotiate bilaterally over-the-counter (OTC) between counterparties for Swap, prediction market contracts have economic behaviors like exchange-traded and standardized commodity "futures." They are fungible and traded publicly on a registered Designated Contract Market (DCM) open to countless participants. The CFTC has officially determined that prediction market event contracts can legally be both "swap" and "futures", i.e., *not mutually exclusive*; and if an event contract is structured and traded as a standard futures contract, it is **excluded from the statutory definition of a swap**.[8]

In fact, policy makers should take a step back to consider what actuaries and underwriter of insurance do – dealing with probabilities of event outcomes. The objective and primary function of insurance is to **manage uncertainty**. Prediction markets and insurance both deal with uncertainty about future events amid differences in structure and risk transfer mechanisms. When the Chicago Board of Trade (CBOT) designed and launched the **Insurance Catastrophe Futures** and cited the Casualty Actuarial Society document in supporting that "*catastrophe futures contracts are cash settlement index contracts*,"[9] they relied on **structural choices** to fall entirely under the CFTC's exclusive jurisdiction as regulated futures, thereby preempting state anti-gambling laws and insurance mandates.

As showcased above, prediction markets event contracts can take many "forms" – swap, SBS, futures, pooled insurance vehicle, etc. Traditional regulatory categories (broker, dealer, exchange, fund) obscure the underlying economic behavior that determines how risk is created, transformed, routed, and absorbed. Hence, one should NOT judge purely on the literal terms print on the event contracts, but the "*economic substance*" of which **structural choices** would operators of Prediction Markets have, and its upstream and downstream effects on the overall derivative ecosystem. These **structural choices** should give consideration in addressing any agency problem, moral hazard, and if the market's payout becomes a more powerful motivator for a decision-maker than their professional or ethical duty, then it is a **red flag**. This parallels the securities market, where routing orders for *proprietary gain* over client best interests is a *conflict of interest*.[10] So, when we classify firms by what they do with risk or evaluate market designs, the industry value chain resolves into five distinct layers: Hunters, Risk Packagers, Intermediaries, Risk-Warehouse, and Flow-Harvesters.

Hunters	**Risk Packagers**	**Intermediaries**	**Risk-Warehouses**	**Flow Harvesters**
Seek risk chase alpha, generate volatility, not running CPOs / CTAs	Assemble, structure, and redistribute risk into new forms	Infrastructure pipes, do not warehouse risk or aggregate flow	Balance-Sheet Absorbers, no swap offer or < threshold	Distribution channels farming retail order-flow + collateral mgt.

This **Five-Layer Behavioral Risk Taxonomy** captures the economic incentives and microstructure functions of each participant. It accurately reflects observable phenomena or market dynamics that explains why certain firms must be categorized differently than regulatory labels or legacy market conventions suggest. Accordingly, policy development and rulemaking should ensure: (a) no single layer captures outsized economic rents due to regulatory gaps or structural privilege; (b) no single category becomes vertically integrated to the point of distortion; (c) no structural bottlenecks (e.g., clearing, custody, prime brokerage) becomes a choke point; (d) no technology layer outruns rulemaking, no regulatory lag-induced arbitrage that distorts incentives; and (e) Clearing and settlement are neutral, NOT profit centers.[11]

[8] https://www.federalregister.gov/documents/2026/03/16/2026-05105/prediction-markets
[9] https://www.casact.org/sites/default/files/database/dpp_dpp96_96dpp047.pdf
[10] https://www.sec.gov/newsroom/press-releases/2018-108 ; https://www.sec.gov/newsroom/press-releases/2018-159 ; https://www.finra.org/sites/default/files/fda_documents/2022073414301%20BofA%20Securities%2C%20Inc.%2C%20CRD%20283942%20AWC%20ks.pdf
[11] https://www.linkedin.com/pulse/securing-true-fintech-competition-integrity-kelvin-to-ihdwc/

The Murky Water and Principle to Segregate Cause versus Effect

Prediction market event contracts are regulated under CFTC or SEC rules because their structural payout math satisfies the statutory definitions of a **derivative instrument**, such as a swap or a futures contract, regardless of whether a market participant utilizes them for risk hedging or pure economic speculation. Prediction markets hedge against the occurrence of the event itself. Thus, it is an exposure to the underlying **"cause"**. In contrast, SEC-regulated Options and SBS are designed to provide exposure to the financial **"effect"**.

Exposure to a specific "**cause**" represents just *one potential pathway to an event*, serving as a sufficient *condition alongside other independent factors* that could lead to the same outcome. Witnessing the final "**effect**" confirms that the outcome is *already present*, meaning that *at least one of these causal chains* has been successfully *finalized*. Just because two things happen together does not mean one caused the other. They might both be caused by a third hidden event.

Basing on the principle in above box, we are formulating an **Exposure to Cause versus Effect** (E2CvE) Model (bright-line Test) – a structural solution to the ongoing jurisdictional friction between the CFTC and the SEC over emerging Prediction Markets event contracts. Under the current Dodd-Frank framework, if the event directly impacts the financial condition and governance of a single corporate issuer, the SEC may claim its oversight stake under the Securities Exchange Act (SEA) §3(a)(68) as if corporate equity *reacts* to everything – from weather and macroeconomic data to supply chains – any contract on an input variable can be argued to "*affect a listed security*." So, a binary contract on *"Will Tesla deliver 500,000 cars this quarter?"* falls into a **GRAY AREA** if the SEC **overextension** of its authority to argue "*car delivery numbers directly affect Tesla's stock price*."

The SEC's "Event Contract Prong" expansion introduces **overextension** risks by *treating raw operational variables as security-based variables*. Using data sources like a 10-K to draw the boundary fails because companies routinely disclose raw operational facts (like carbon emissions, factory footprints, or production counts) in their SEC filings. If the boundary is based purely on the document, the SEC **overextends** anyway. Reliance on a **"But-For" causation doctrine is flawed.**

The Principle of Non-Exclusivity of Cause: An operational variable can be the root cause of multiple unrelated market outcomes. Tesla's production volume affects its stock price, but it simultaneously dictates global lithium demand, local labor economies, and competitor pricing. Because a *primary cause ripples across the entire commercial ecosystem*, it *cannot and should not be claimed as an exclusive "security-based" variable*; it is a broad economic commodity.

The "But-For" Absurdity: If a hurricane destroys an oil refinery and causes an oil company's stock to crash, a contract tracking the hurricane does not mutate into an SEC-regulated security swap. It remains a CFTC commodity swap. The same boundary must apply to a factory's physical output.

To prevent the SEC from swallowing the prediction markets whole, the vague "*affects an issuer*" standard must be replaced with a robust, mechanics-driven boundary based on what a contract settles against, rather than its downstream economic narrative.

The Functional Separation: Cause versus Effect

To eliminate duplicate policing and regulatory duplication, risk must be categorized by its true economic nature:

The Causal Spectrum	
Exposure to CAUSE (CFTC-regulated Swap / Commodity Futures) • Structural and Inputs • Real-World Performance • Distributed Impacts	**Exposure to Effect** (SEC-regulated SBS) • Valuational Outcomes • Synthesized Market Cap • Tied to a Single Issuer

1. *CFTC Jurisdiction: Exposure to Cause (Structural & Operational Risk)*
   A contract provides **exposure to a cause** if it measures an input, operational metric, or external contingency that *exists independently of a financial market's appraisal*. Given that production volumes, supply chain latency, meteorological data, and physical asset metrics are raw, **real-world variables**. They are the ***drivers of value*, not the value itself**. For the **Settlement Mechanism**, the contract payouts should be hard coded to settle against independent, third-party data inputs. They require no calculation of a market stock price or equity multiplier.
2. *SEC Jurisdiction: Exposure to Effect (Valuational Risk)*
   A contract provides **exposure to an effect** if it directly measures the synthesized, capital-market appraisal of a security issuer. Given that stock prices, earnings per share, net income, and market capitalization do not exist in the physical world. They are **financial effects** – *synthesized calculations that blend operational causes with investor sentiment, macro discount rates, and market liquidity*. For the **Settlement Mechanism**, the payoff should be mathematically **dependent on valuational expressions of security issuers**. The parameter stops strictly at the borders of the tradable security instrument itself.

When one trades an event contract on a CFTC-regulated **prediction market**, the person is taking a position on the root **cause** itself. When one trades zero-days-to-expiration (**0DTE**) **Options** or corporate binary event contracts, the person is exposing himself/ herself to how a company's equity *reacts to those causes* – i.e., exposure to the **"effect"**. This **E2CvE** model maps cleanly onto the active jurisdictional "*jump ball*" currently taking place. To further strengthen the E2CvE model, the **bright-line test** should tie to the structural vehicle handling the contract, see later section.

The SEC and CFTC should observe the phenomenon that **Prediction Markets** and ***0DTE Options*** markets are becoming increasingly intertwined.[12] Traders use 0DTE Options and Prediction Markets as dual layers of protection by separating the "**event outcome**" from the "**market reaction**." 0DTE options and Prediction Markets both **compete** and **complement** each other. Watch out for unintended structural incentives for agency problems and moral hazard. If a market's payout becomes a more powerful motivator for a decision-maker than their professional or ethical duty, then it is a **red flag**.

Also, "*Direct Retail Clearing Model*"[13] is problematic. While it eliminates broker layer, retail participants suffer a severe structural deficit in legal rights compared to traditional intermediated markets. Retail traders lose their protected status as "*Public Customers*" and are legally classified as institutional "*Direct Clearing Members*" under Part 39. They sacrifice suitability rights and access to the NFA's low-cost Arbitration Program.

[12] https://ir.cboe.com/news/news-details/2026/Cboe-Introduces-Innovative-Prediction-Markets-Framework-Expanding-Choice-Beyond-Yes-Or-No-Outcomes/default.aspx
[13] https://www.fia.org/sites/default/files/2026-02/FIA%20Response%20to%20CFTC%20on%20Direct%20Clearing%20of%20Derivatives%20by%20Retail%20Investors.pdf

If a vertically integrated platform or DCO experiences an operational failure, a smart-contract hack, or an internal bot-trading glitch, a retail user faces the liquidation estate directly without a broker cushion. Another concern is the **Compression Loop**. Under Part 190 bankruptcy mechanics, uninvested cash balances sitting idle on the platform are swept alongside active wagers into a single pool of "*Member Property*" that is subject to strict **pro-rata haircuts**. If a platform runs portfolio compression cycles right before insolvency, individual retail trade identities are permanently erased and consolidated into institutional blocks, effectively trapping retail funds inside prolonged forensic litigation.

Beware of a **Neutral Intermediary** turn into a **Risk Transformer**. Allowing a vertically integrated platform or its affiliated Derivatives Clearing Organization (DCO) or Automated Market Maker (AMM) to flick between acting as an agent for a client versus acting as a proprietary counterparty. This parallels the securities market, where routing orders for *proprietary gain* over client best interests is a *conflict of interest*.[14]

Mixed Swap: Structured Notes, Narrow-based Security Indexes, Credit Default Swap

In another phenomenon, investment banks act as risk packagers/ transformers are issuing ***structured notes*** to their clients, then went onto a CFTC-regulated ***Prediction Market*** to buy event contracts to hedge its own risk.[15] Again, it is NOT about the "*form*" of this hybrid financial instrument, but the "*economic substance*" of whether the trading activities mimic a swap or an SBS transaction. Because a structure note's payout is tied to a derivative, the current **GRAY AREA** is its value shifts based on the underlying yields or market prices.

NOTE: the SEA §3(a)(68)(D) and CEA §1a(47)(D) are purposefully identical regarding the concept of "***Mixed Swap***" introduced by the Dodd-Frank Act; together it creates *dual-regulatory regime* and the "*Joint Petition Process*" that supposed to help untangle red tape and issue a customized, single set of rules for a specific hybrid product. Under the current regime, the Commissions typically look for **evidence of indebtedness** in these ***structured notes*** to consider such as a "*security*" and thus **excluded** from the definition of "*swap*" pursuant to CEA section 1a(47)(B)(vii).

However, issuers can also create private, custom-weighted indexes of corporate bonds or assets to serve as the reference trigger. Because these index formulas can look exactly like the "***narrow-based security indexes***" (**NBSI**) used to define SBS, it is incredibly difficult to draw a clean line under the current regime to show where the SEC-regulated "*security*" ends and the CFTC-regulated "*swap*" begins. Risk exacerbates if the underlying triggers are tied to for example a specific third-party corporation defaults – that is economically identical to a ***Credit Default Swap*** (*CDS*).

We caution against leaving equity-referenced "***perpetual***" contracts unregulated or forcing them into legacy definitions, as an administrative vacuum drives institutional liquidity offshore and fragments cash securities markets. Under the surface, perpetual futures mimic a "*baccarat casino*" by pooling and netting opposing wagers to keep the house neutral. However, their use of leverage, continuous real-time margining, and lack of expiration turn them into dynamic, stress-transmitting instruments. Leaving this perpetual architecture unaddressed transforms exchanges into active risk packagers, creating a dangerous feedback loop where synthetic side-bets transmit compounding volatility directly into central clearing ecosystems and threaten systemic financial collapse. See our response to Annex 1 – Q11.

Under the **E2CvE** framework, the jurisdictional friction caused by private, custom-weighted corporate indexes is resolved by *looking past the mathematical formula of the index and focusing entirely on its execution architecture and settlement data sources*. Amid a custom index of corporate bonds, the formula itself will look like a NBSI, the E2CvE model prevents the SEC from automatically asserting exclusive SBS jurisdiction by applying 3 structural filters:

[14] https://www.sec.gov/newsroom/press-releases/2018-108 ; https://www.sec.gov/newsroom/press-releases/2018-159
[15] https://www.bloomberg.com/news/articles/2026-04-02/first-prediction-market-note-offers-nvidia-bets-with-less-risk

(a) *The Operational Sorter: The Settlement Mechanism Test*

The first structural filter is determined by the specific *data source and settlement mechanics*, not the asset narrative.
If the Index Settles Against Market Appraisals: If the custom index changes value based on secondary market bond prices, yields, or CDS pricing, it measures **Valuational Risk (an Effect)**. Because these metrics reflect synthesized capital-market sentiment and investor demand, the contract stays firmly in **SEC Jurisdiction as an SBS**.

If the Index Settles Against Operational Realities: If the index uses corporate identifiers but settles strictly against *non-valuational data*—such as a custom-weighted index tracking the physical volume of cargo moved by five specific airlines – it measures a **Structural Cause**. Because it ignores the financial appraisals of those companies, it remains a **CFTC commodity swap**, completely bypassing SEC overreach.

(b) *The Legal Filter: The Insulated Valuation Test*

Instead of using a "*But-For*" causation doctrine, the E2CvE model uses an **Insulated Valuation Test**:
To be classified as an **SEC** security instrument, the payout must be **mathematically dependent on valuational expressions** (e.g., stock price tickers, debt yields, or ledger net profit).

If a private contract can be *completely evaluated and settled using third-party logs* (like supply chain latency or factory shut-downs) without ever pulling a live market price or requiring an equity multiplier calculation, **the SEC's parameter stops at the ledger's edge**. The contract is an exposure to a cause, keeping it inside the **CFTC**'s domain.

(c) *The Structural Gate: The Operational Intent Test and a Fiduciary Passport for Gray Areas*

If an issuer creates a truly ***inseparable index*** that mixes structural causes with corporate credit events, it triggers a **Mixed Swap** classification. The E2CvE framework routes the product based on its operational vehicle:
The Exchange Lane (DCM): If the custom index is listed on an open, multi-lateral trading venue featuring high-velocity algorithmic bots and marginal leverage, it generates a continuous price-discovery loop. This trading environment creates a "*Valuation Mirage*" that mimics an equity derivative, forcing the product into **SEC oversight**.

The Fiduciary Lane (CPO): See later section regarding Prediction Market event contracts akin to Catastrophe Insurance and how allowing a fiduciary fully-collateralized CPO to add trade matching function is a safer and superior structure than "*Direct Retail Clearing Model*" and without the adverse effects of Europe style Multilateral Trading Facility (MTF). In short, If the contract is packaged inside an alternative, 100% pre-funded Series LLC structure managed by a **CPO**, it acts as a passive, parametric insurance pool. Under Part 4 fiduciary rules, speculative day-trading is banned, and there are no synthetic price-discovery curves. The SEC grants **substituted compliance** – the platform operates entirely under lean CFTC structural rules while the SEC retains simple, non-duplicated anti-fraud oversight.

This Operational Intent Test (OIT) formalizes a clear sorting mechanism for federal oversight. If a platform operates a closed, parametric risk conduit utilizing a 100% pre-funded CPO structure to hedge physical **causes**, the CFTC can consider subjecting that CPO to an alternative compliance and a streamlined data reporting requirement. This substituted compliance allows the platform to run under CFTC operational parameters while adhering to basic SEC insider trading anti-fraud protections. By formalizing these boundaries through the recommended amendments to §1a(47)(B), the financial system is protected from systemic margin contagion loops while safeguarding innovative, high-fidelity forecasting signals for the public interest.

The E2CvE model ensures that financial engineering cannot use a custom index formula to blur the law. If the custom index tracks the **synthesized market price** of corporate assets, it is an **SEC Effect**. If it isolates and tracks the **raw operational output** of those corporate assets independent of market sentiment, it is a **CFTC Cause**.

Recommended Statutory Amendments to CEA Section 1a(47)(B)

To formalize this E2CvE boundary in the final Title VII harmonization rules and secure a programmatic firebreak against SEC encroachment, Congress or the joint commissions must amend the exclusions under §1a(47)(B) of the Commodity Exchange Act. We propose the following statutory text to establish a two-part **Bright-Line Test**:

7 U.S.C. § 1a(47)(B) is amended by striking clause (v) and inserting the following:

(v) **THE DIRECT TARGET RULE** – Any contract, agreement, or transaction shall be deemed a security-based swap if and only if its payoff is explicitly and mathematically dependent on a tradable security price, a debt instrument, a narrow-based security index, or a formal credit default or corporate bankruptcy filing.

(vi) **THE OPERATIONAL SEPARATION SAFE HARBOR** – Any contract, agreement, or transaction that measures an operational event, physical output, macro-contingency, or regulatory milestone ("a **cause**") shall be classified as an Excluded Commodity under the exclusive administrative purview of the Commission. The Securities and Exchange Commission is statutorily barred from recharacterizing the contract as a security-based swap based on downstream impacts or correlations to an issuer's stock price, financial statement, or corporate filings, provided that:

(I) the contract can be evaluated or settled using third-party data independent of the issuer's statutory accounting disclosures; and

(II) the execution venue enforces a code-governed architecture under the Fiduciary CPO-Matchmaker Model.

Vertical Integration, FSOC Concerns, and NOT following the Europe MTF model

The SEC's "*Valuation Mirage*" treats a direct-access, direct-clearing platform as if it were a highly leveraged securities exchange. Forcing prediction markets to map a $1 retail contract into traditional Swap Data Repository (SDR) fields (dynamic variation margins, collateral haircuts, or floating rate resets) via FpML or FIX over SFTP and TCP/IP is an engineering failure. Yet, we identified a **disintermediation trap** and **hidden systemic risk that bypass the FSOC** (Financial Stability Oversight Council) when *event contracts* using a "*Direct Retail Clearing Model*",[16] if the CFTC proposal on Data Reporting requirements for certain Event Contracts[17] is adopted "*as-is*".

Unlike the EU/UK's Multilateral Trading Facility (MTF) model, where MiFID II explicitly permits regulated venues to grant direct electronic access (DEA) to retail participants, provided the exchange architecture handles the consumer suitability natively. The CFTC proposed "Parts 15-18 Routing Approach" for "*Direct Retail Clearing Model*" *conflated the legal boundaries between clients and counterparties*. The CEA has statutory mandate that a single entity cannot control the entire lifecycle of a trade without separating its operations into respective Clearing (*Guarantees the Trade*), Exchange (*Match the Trade*), and Client-Facing Broker (*Holds Client Funds*) functions.

The primary US advantage in market efficiency and lower transaction costs stems from how clearinghouses orchestrate the broader financial ecosystem. Rather than relying solely on their own balance sheets, clearinghouses leverage the entire US financial system to provide capital to members. In this structure banks provide necessary liquidity, the FED serves as the ultimate backstop, and central bank infrastructure handles final settlement. Risk is further mitigated through a robust default **waterfall model**, which systematically adds layers of protection from multiple institutional sources.[18] This demonstrated why the US cannot simply adopt the EU/UK's MTF model.

Amid we support the Commissions establishing a programmatic "Fully Collateralized Tech-Clearing" Safe Harbor to exempt 100% pre-funded, non-intermediated clearing utilities from traditional mutualized banking default funds, a formal update to the CFTC Part 39 remains inevitable. Our analysis[6] concludes that the CFTC (RIN 3038-AF73) proposal strips away strips away time-tested bankruptcy protections, *transforms unprotected retail balances into institutional shock absorbers*, and *leaves systemic risk trackers blind* to cross-border capital concentrations via localized data silos. We concur with the National Futures Association (NFA) that the CFTC must force *vertically integrated platforms* to completely **spin off** their Client-Facing Broker units into separate corporate entities to preserve arm's-length execution standards.[19]

[16] https://www.fia.org/sites/default/files/2026-02/FIA%20Response%20to%20CFTC%20on%20Direct%20Clearing%20of%20Derivatives%20by%20Retail%20Investors.pdf

[17] https://downloads.regulations.gov/CFTC-2026-1453-0001/content.pdf

[18] https://globalriskinstitute.org/publication/incentives-behind-clearinghouse-default-waterfalls/ ; Clearinghouses implicitly leverage or orchestrate the entire US financial system to provide capital to members while banks provide liquidity, the FED serves as backstop and provide settlement infrastructure (i.e. not rely solely on their own balance sheets but uses).

[19] https://www.nfa.futures.org/newsnotices/newsArticle.aspx?ArticleID=5795

Architectural Safeguard: The Fiduciary CPO-Matchmaker Model

Why Prediction Markets Function Like Insurance

As mentioned earlier, prediction markets and **insurance** both deal with uncertainty about future events amid differences in structure and risk transfer mechanisms. Both can be used to hedge against known risk. For example, a citrus farmer might buy a weather event contract to protect against a freeze, much like buying crop **insurance**. Similarly, an insurer pools capital to cover losses from specific events (e.g., hurricanes, accidents), and prediction markets can aggregate capital to cover parametric events (e.g., "*Will Hurricane Ian hit Florida?*").[20]

Insurers pool premiums from many policyholders to cover losses. Prediction markets pool liquidity from traders to back contracts, creating a shared capital base for risk coverage. Prediction markets are more transparent, capital-efficient, (and speculative if under SBS or DCM model), while **insurance** is centralized, regulated, and focused on loss protection rather than profit potential. See below table for the Economic equivalence of Event Contracts versus **Insurance**:

Feature	Traditional Insurance	Prediction Market Event Contract
Trigger Mechanism	Filing a manual claims adjuster report (lengthy process).	An objective, public data source verifies the outcome (instant settlement).
Payout Basis	Indemnification (must prove exact financial loss).	Parametric payout (all-or-nothing binary mechanism or fixed tier).
Risk Matching	Underwritten by a single insurance carrier.	Matched against an opposing market participant on a DCM.

Practical Examples of the Insurance Function

1. **Commercial Supply Chain Insurance**

   The Risk: An auto parts manufacturer loses millions in revenue if a critical foreign microchip factory fails to open on time due to regulatory delays.

   The Prediction Market Hedge: The manufacturer buys "No" contracts on the factory opening by a specific date. If the factory stays closed, the market payout offsets their supply chain operational losses.

2. **Small Business Continuity Protection**

   The Risk: A local restaurant's summer revenue depends heavily on a major nearby outdoor music festival happening. If the city revokes the festival's permit due to local protests, the restaurant loses its seasonal profit.

   The Prediction Market Hedge: The restaurant owner buys contracts predicting the festival will be canceled, securing a cash buffer if their physical foot traffic disappears.

3. **Consumer Cost-of-Living Hedging**

   The Risk: A homeowner planning a cross-country move faces the risk of a localized housing market crash before they can list their property.

   The Prediction Market Hedge: The homeowner takes a position on a regional real estate pricing event contract, locking in a baseline financial safety net.[21]

[20] https://chainscorelabs.com/blog/prediction-markets-and-information-theory/prediction-markets-as-hedging-instruments/why-prediction-markets-will-cannibalize-traditional-insurance

[21] https://www.wealthsimple.com/en-ca/learn/prediction-markets-hedge-macro-risk#how_prediction_markets_measure_macroeconomic_risk

If a prediction market contract operates like **insurance**, it should logically fall under the **Insurance Safe Harbors** exclusion of **Title VII**. The structural choice of our earlier discussed CBOT Insurance Catastrophe Futures falls entirely under the CFTC's exclusive jurisdiction as regulated futures, thereby **preempting State anti-gambling laws** and **insurance** mandates.

During its On-Exchange Era (1992-2000), the CBOT catastrophe contracts were specifically designed as **exchange-traded futures and options**, not OTC swaps. The SEC had zero jurisdiction over these original contracts. Because the payout was **tied to an aggregated industry loss index** compiled by the Property Claim Services office – and NOT the stock price, debt, or financial execution of a specific insurer or issuer – the contracts could NOT be classified as securities.

The Modern Era: Post-implementation of the Commodity Futures Modernization Act (CFMA) since 2000

The primary reason modern catastrophe bonds are structured as **debt securities** rather than **exchange-traded futures** and options is **to completely eliminate counterparty credit risk through *full collateralization* via a dedicated Special Purpose Vehicle** (SPV).[22] As the market shifted away from exchange-traded catastrophe futures toward **Catastrophe Bonds** and **OTC Catastrophe Swaps**, the legal exemptions became highly formalized. Modern **Insurance-Linked Securities** (ILS) rely on specific **safe harbors** to maintain compliance:

- Under the CFMA 2000, catastrophe indices were classified as "**Excluded Commodities**" (codified in 7 U.S.C. §1a (19)).[23] The statutory text defines an **excluded commodity** to include any "*index or measure of contingencies beyond the control of the operators.*" This explicit classification keeps weather, earthquake, and hurricane data within the commodities bucket.[24] Under **Title VII** of the Dodd-Frank Act, to prevent standard reinsurance from being classified as a swap, the agencies created the **Dodd-Frank Insurance Safe Harbor**. To use this exclusion, the protection buyer must *hold an active insurable interest* and prove an *actual financial loss*, *separating true insurance from tradeable event contracts*.[25]
- When investment funds issue catastrophe bonds, they pool investor money to back the potential catastrophe payout. Legally, this risk could turn the fund into a "**commodity pool**." In the traditional derivatives value chain, a **Commodity Pool Operator (CPO)** functions strictly as a **buy-side fiduciary**. Its primary role is to aggregate capital from multiple investors and direct that pooled money into derivatives markets – such as futures, options, and swaps – acting as an institutional participant rather than market infrastructure. This addresses the core problem – *favorite longshot bias* – in Prediction Markets that harms retail investors per the empirical **Whelan Paper**,[26] if the CPO can structure the vehicle as a specialized Delaware Series LLC or a Series Trust, see later section.

Put aside CPO's current statutory limitations for a moment and recall the "*Direct Retail Clearing Model*". Again, we strongly disagree with the CFTC proposed "Parts 15–18 Routing Approach" for Direct Clearing that it *conflated the legal boundaries between clients and counterparties*. For a **pragmatic solution** in view of global competition with prediction markets from overseas that adopted the MTF model, let's assume the CEA Part 4 (CPO Rule), Part 38 (Exchange Rule), and Part 39 (Clearing Rule) can be updated per our recommended amendments to permit a **CPO Matchmaker model**.

When a platform operates as a CPO Matchmaker rather than a traditional exchange, it shifts its legal taxonomy from market infrastructure to an **asset aggregator**.

[22] https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1540-6296.2008.00127.x ; https://www.chicagofed.org/publications/chicago-fed-letter/2018/405 ; https://www.sciencedirect.com/science/article/abs/pii/S0098300409002969
[23] https://www.law.cornell.edu/uscode/text/7/1a#19
[24] https://www.law.cornell.edu/definitions/uscode.php?width=840&height=800&iframe=true&def_id=7-USC-1236919383-1954888351&term_occur=3&term_src=title:7:chapter:1:section:2#:~:text=Excluded%20commodity,equity%20instrument%2C
[25] https://www.askramerlaw.com/publications/weather-climate-risk-management-part-iii
[26] https://www.karlwhelan.com/Papers/Kalshi.pdf

- **The Architecture:** The platform utilizes a Delaware Series LLC to isolate individual pre-funded client accounts into distinct corporate cells.
- **The Physics:** The track is hard-capped at a 100% pre-funded, zero-leverage model. Because the maximum potential loss is locked in escrow from day one, default risk is zero, exempting the structure from Part 39 DCO mutualized default fund mandates.
- **The Fiduciary Shield:** Under CEA Part 4 rules, the operator owes a non-waivable federal fiduciary duty to pool participants. Automated liquidity bots and adversarial proprietary trading loops are legally banned.

Because a CPO pool does not allow speculative day-trading or synthetic price-discovery curves, there is no "*market sentiment*" or valuational effect being generated. By freeing from noises (toxicity and adverse selection) and bias (*latency, rebates, bundling discrimination, volume vs integrity paradox*) commonly associated with Commodity and Securities Exchanges, a CPO Matchmaker operates **purely** as a parametric insurance conduit in protecting the purity of the oracle "forecast" and its clients. This model maximizes economic values of a prediction market. It fits cleanly into the commercial insurance **safe harbor**. A fully collateralized CPO Matchmaker may grant **Title VII** exclusion to relief the platform from cumbersome Swap compliance requirements. It will be subjected to CFTC and NFA oversight. Regulators can be at ease given the fiduciary alignment of interests between a CPO and its clients. It is safer than the "*Direct Retail Clearing Model*" for the overall health of the US financial system.

Why Traditional Exchange concepts do NOT translate cleanly to binary prediction markets

Because an arm's-length DCM generates a volatile price-discovery curve driven by high-frequency bots, the price of the contract itself stops behaving like a raw operational metric and mutates into a volatile financial asset – an **Effect**. This "Valuation Mirage" is exactly what invites the SEC to step in, as the contract's trading behavior mimics an equity derivative. Traditional exchange concepts like "*best execution*" or "*underlying asset valuation*" do NOT translate cleanly to binary prediction markets. Prediction Markets operate more like decentralized, parametric insurance pools than equity markets. In a traditional Derivatives Clearing Organization (DCO), clearing members are exposed to massive systemic risk via leverage and mutualization. A hybrid CPO-Matchmaker completely reverses this danger:

- **No Mutualized Default Risk:** Traditional clearing members must contribute to a default fund. If another giant clearing bank defaults during a market crash, its capital is seized to cover the losses. In a prediction market CPO, there is no mutualization. Because every position is 100% pre-funded, a default cannot occur, meaning an investor's cash is never weaponized to rescue a failing competitor.
- **Bankruptcy Remote Assets:** Under CFTC Rule 4.20, a CPO must operate a pool as a separate legal entity from the operator itself. All client funds must be held in the name of the pool, not the startup. If the startup's operating business goes bankrupt, the prediction market's matching engine freezes, but the clients' pre-funded cash remains legally isolated and cannot be seized by the startup's corporate creditors.
- **Strict Fiduciary Duty:** Traditional exchanges operate under "*commercial arms-length*" rules – they do not owe traders a fiduciary duty. A CPO, by law, is an investment fiduciary. The firm would face severe federal criminal penalties if it misallocated, co-mingled, or used client pool funds for corporate operations.

The Strategic Incentive Impasse

Small domestic US FinTech get caught in the crossfire. The existing regulatory framework focuses on *what* is traded rather than *how* it is executed. It sparks a "Gresham's Law of Microstructure" and fuels a race to the bottom.[27]

For examples:

1. Codifying a "Micro-FCM" or "Retail DCO" Registration Category[28]

Congress and the CFTC to establish a streamlined, low-overhead registration tier to allow a single corporate entity to combine exchange execution and direct retail clearing, provided it operates under a strict, alternative rulebook:

- **Exemption from Credit-Risk Rules**: Platforms are statutorily exempt from legacy Part 39 default waterfall contributions, institutional stress testing, and mutualized default insurance.
- **Mandatory Operational Capital**: Instead of holding capital reserves against trading defaults, the platform must maintain a liquid financial buffer scaled strictly to its **cybersecurity exposure and operational overhead**.

2. The Technological Compromise: "Embedded" Broker Modules[29]

Instead of a physically and legally spun-off corporate broker subsidiary that routes orders via slow external APIs, the platform isolates its client-facing duties using **isolated software modules** within its unified tech stack:

- **The Compliance Ledger**: The platform runs an integrated, automated KYC/AML and suitability engine at the point of user onboarding, satisfying the NFA's customer protection mandate.
- **Frictionless Direct Execution**: Once a user is verified, their orders face the matching engine natively on a single ledger, preserving the millisecond transaction speed and low fee structure vital to micro-sized event contracts.

3. Resolving the Bankruptcy & Compression Gridlock[30]

To satisfy the strict consumer safety requirements of Part 190 without destroying the efficiencies of portfolio compression, the compromise mandates a **Direct-to-Consumer Property Shield**:

- **The Traceable Sub-Ledger**: DCOs utilizing compression are required to maintain automated, real-time cryptographic tracking or secondary sub-ledgers that map the original beneficial owner of every compressed leg.
- **Bankruptcy Super-Priority**: If a platform suffers an operational collapse, Part 190 rules are adjusted to recognize this unique account class. Retail funds are legally classified as **isolated customer property** that cannot be frozen, netted, or dragged into pro-rata loss distributions to pay off institutional clearing house creditors.

4. The Funding and Oversight Compromise

To lift the direct surveillance burden off the CFTC's internal PERT system, platforms operating under this new tier must become **specialized members of the NFA**:

- **The Transaction Assessment Fee**: The platform pays a micro-fee per contract directly to the NFA. [31]
- **Independent Tech Auditing**: The NFA uses this new revenue stream to fund specialized, tech-focused compliance teams that conduct automated algorithmic audits and verify that the platform's internal matching bots are not engaging in wash trading or front-running retail users.

---

[27] https://en.wikipedia.org/wiki/Gresham%27s_law ; https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3236030
[28] https://www.fia.org/sites/default/files/2026-02/FIA%20Response%20to%20CFTC%20on%20Direct%20Clearing%20of%20Derivatives%20by%20Retail%20Investors.pdf
[29] https://comments.cftc.gov/Handlers/PdfHandler.ashx?id=35787
[30] https://www.cftc.gov/LawRegulation/FederalRegister/finalrules/2022-17736.html ; https://www.fia.org/sites/default/files/2019-05/FINAL-FIA-Europe-response-to-the-EMIR-Review.pdf
[31] https://www.nfa.futures.org/members/ib/regulatory-obligations/digital-asset-commodities.html

The Legal Re-Engineering: A "Micro-Exchange" Safe Harbor

Currently, a CPO is strictly an **asset aggregator** (a buy-side entity), while an exchange is a market-maker facility (a market-infrastructure entity). If the CFTC authorized this hybrid model, it would create a "Micro-Exchange Safe Harbor" aimed at early-stage innovation:

- **The New Exemption Metric:** Instead of measuring the 5% margin limit against a fund's asset value, the de minimis test would track platform-wide open interest or aggregate daily matched volume (e.g., capped at $5 million in active contracts). Issuers rely on the CFTC Rule 4.13(a)(3) *De Minimis Exemption*[32] or formal CFTC *CPO No-Action Relief*,[33] which ensures that as long as the fund holds passive, highly rated collateral and behaves as a conduit for insurance risk, it does not need to register as a commodity pool.
- **The Regulatory Grace Period:** A startup could launch a public-facing, fully collateralized matching engine immediately, enjoying an exemption from heavy exchange core principles until it scales past the designated volume threshold.

Bypassing the Banking Funds via "CPO Accounts"

By allowing a public prediction market to run through a CPO structure, startups could elegantly bypass the traditional, mutualized banking default insurance funds.

- **The Cash Flow Mechanism:** In this hypothetical rule, every participant's wallet on the platform would legally be treated as an individual, fully collateralized sub-account within a master commodity pool.
- **The Elimination of Margin Risk:** Because the CPO rules would mandate 100% pre-funding for every event contract, the platform would never face a participant default. If a massive economic or political event occurs, the cash to pay the winners is already locked inside the pool's omnibus account, rendering a banking guarantee fund legally obsolete.

Overcoming the Retail Marketing Hurdle

The most critical change would be the removal of CFTC Rule 4.13(a)(3)'s absolute ban on public marketing. The CFTC would replace it with a "Retail Prediction Safe Harbor" prong:

- The CPO Matchmaker would be permitted to openly advertise their event contracts to the public.
- To protect retail participants without imposing institutional CPO compliance, the rule would enforce strict individual position limits (e.g., capping any single retail user at $2,500 per event contract) to mitigate consumer financial risk.

If the CFTC were to collapse the statutory divide and allow a prediction market startup to operate as a "Hybrid CPO-Matchmaker," the clients would legally transform from retail traders into pool investors (Limited Partners/Beneficial Owners). In this hypothetical architecture, these clients would be significantly better protected against counterparty credit risk and platform default than a traditional "*clearing member*" under the "*Direct Retail Clearing Model*".

Legal taxonomy in traditional derivatives framework is flawed when applied to modern, fully collateralized systems. By decoupling the true economics of binary forecasting from the legacy rules designed to protect highly leveraged, multi-tiered banking markets, this dismantles the CFTC's typical "liquidity trap" defense and highlight exactly how the CPO model, reinforced by fiduciary duties, can superiorly protect market participants.

The CFTC's traditional worry that a "market freeze" will leave hedgers stranded makes sense for leveraged physical futures (e.g., crude oil), but it is **a false analogy for prediction markets**.

[32] https://www.nfa.futures.org/members/member-resources/files/exemptions-reference-guide.html
[33] https://www.guycarp.com/insights/2015/02/cftc-provides-conditional-relief-to-certain-ilscat-bond-issuers.html

- **The Leveraged Exchange Threat:** In standard markets, if a disaster strikes, a clearinghouse collapses because participants cannot cover their margin spikes, creating a multi-billion-dollar deficit.
- **The Fully Collateralized CPO Edge:** In the pre-funded CPO structure, the concept of a "*payout freeze*" is mathematically impossible. Because the maximum potential payout is 100% locked in escrow from day one, there is no debt, no leverage, and no capital call risk. If a catastrophic storm hits, the cash is already waiting in trust. The hedger does NOT need "*exit liquidity*" to dodge a margin default because their maximum loss is fixed at zero beyond what they put upfront.

The DCM Market Integrity Failure (The Whelan Paper & AMM Exploits)

Unlike the SEC-regulated equity markets, CFTC-regulated DCMs are market makers driven. Automated market makers (AMMs) and designated market makers (DMMs) "*leaning with the wind*" reflect the cutting edge of prediction market research. As documented in the **empirical Whelan Paper**,[26] the reality on open DCM/DCO platforms is often predatory rather than fair:

- **The Pick-Off Problem:** When news of a disaster or political shift breaks, AMMs and automated market-making algorithms instantly recognize they are about to be "picked off" by faster, asymmetric insider information.
- **The Pervasive DCM Defect:** To defend themselves, these market makers aggressively widen their spreads to un-tradable levels or front-run arriving retail orders. The "deep liquidity" promised by the exchange model completely vanishes precisely when hedgers need it most.

Why a CPO's Fiduciary Framework Wins

Replacing an antagonistic exchange order book with a CPO pool anchored by federal fiduciary mandates shifts the legal dynamic completely in favor of the participant.

Metric	Traditional DCM / DCO Model	The Fiduciary CPO Variant
Market Maker Alignment	Commercial arms-length. Free to widen spreads, extract rents, or manipulate curves to protect their own balance sheets.	**Strict Fiduciary Duty**. Under CFTC Part 4, the operator must execute strictly in the sole economic interest of the pool participants
Adverse Selection Protection	Retail "Takers" absorb a persistent favorite-longshot bias and lose to sophisticated high-frequency insiders.	The pool balances risks collectively, mitigating the individual "*predatory speed*" disadvantage.
Price Anchoring	Pure speculation. Prices reflect who can hit the bid fastest during a chaotic event loop.	Hard coded to transparent, objective third-party settlement data.

Recommended Amendments to CFTC Parts 4, 38, and 39

To make a "**Fiduciary, Pre-Funded CPO Matchmaker**" model legally permissible, the CFTC would have to execute a coordinated overhaul across multiple parts of its rulebook. This absolutely must include Part 39, alongside critical rewrites to Part 4 and Part 38. See below for the suggested rule changes:

Part 39 (Clearing) must be Amended

The CFTC must introduce a new Exempt DCO Framework under Part 39 (leveraging its authority under Section 5b(h) of the CEA). The rule would state that a registered CPO operating a 100% fully collateralized, non-leveraged, parametric event-contract pool is exempt from core Part 39 compliance (such as maintaining a mutualized default guaranty fund, complex liquidity stress-testing, and standard clearing-member rules), provided that 100% of the maximum potential loss is held in an isolated trust from day one.

Required Changes to Part 4 (CPO Rules)

- **The Required Rule Change (Amending Rule 4.20):** Currently, CFTC Rule 4.20 strictly prohibits a CPO from engaging in behavior that mimics an exchange or intermediary. The CFTC would need to append a specific carve-out to Rule 4.20 allowing an "Internalized Peer-to-Peer Risk-Matching Feature" exclusively for pre-funded, binary event contracts.
- **The Marketing & Retail Relaxations (Amending Rule 4.13):** If this startup model is facing the public, the marketing ban in the de minimis safe harbor must be replaced with a customized "Retail Event Pool" safe harbor. This would permit public solicitation but impose hard-coded individual exposure caps (e.g., no single pool participant can risk more than $2,500) to satisfy the CFTC's retail consumer-protection mandate.

Required Changes to Part 38 (Exchange Rules)

§5 of the CEA states that any multi-lateral facility that matches trades must register as a DCM. In order for a CPO matches trades internally without being charged as running an illegal, unregistered DCM, the CFTC must utilize its general exemptive authority under §4(c) of the CEA to declare that a fully collateralized, fiduciary-backed CPO matching internal event contracts is exempt from the definition of a Board of Trade and DCM registration. To withstand administrative law challenges, the CFTC's rule must formally conclude that full DCM registration for a zero-credit-risk pool is unnecessary to safeguard the public interest, event contracts on Enumerated Activities will continue to be banned. The Commission can justify this exemption by showing that the strict fiduciary mandates of Part 4 provide a more effective structural barrier against market abuse than traditional arm's-length exchange rules.

This "**Enhanced CPO**" model is an administrative win for the agency's goals:

1. **The Enforcement:** the CFTC that policing a single, legally bound fiduciary pool (CPO) is far easier for their limited staff than surveilling highly complex, predatory direct-clearing DCM electronic order books prone to AMM front-running.
2. **The "Anti-Offshore" Mandate:** Argue that by refusing to build an agile, pre-funded CPO safe harbor, the CFTC's rigid institutional mindset is actively driving American retail consumers and small businesses into risky, unregulated, offshore crypto-prediction markets.

By tying the E2CvE (Cause vs. Effect) economic test directly to the structural vehicle handling the contract, regulators can safely allow prediction markets to thrive without duplicating the SEC's disclosure apparatus. The framework establishes a **Coexistence Threshold** based on the platform's capital physics and matching engine environment.

Portfolio Compression: Risk Transformation or Risk Management

When platforms deploy advanced risk-mitigation techniques like portfolio compression to reduce gross notional exposures, it complicates oversight, particularly for vertically integrated "*Direct Retail Clearing Model*." Under modified Part 39 and Part 45 reporting, a.k.a. the **Anti-Masking Rule**, a compression cycle is only exempt from real-time reporting if its *sole purpose* is risk reduction with zero change in net market position between identical counterparties. If it transforms the underlying delta or risk profile, it is treated as a brand-new swap.

Portfolio compression allows an asset manager to tear up redundant, offsetting swap contracts to reduce the fund's gross notional exposure without changing its net economic risk. However, if a DCM/DCO platform defaults post-compression, the bankruptcy trustee must evaluate net open positions at the moment of filing. Because compression strips away the individual transaction identities of which retail client owned which exact leg, individual cash balances risk being pulled into a massive pro-rata loss pool to cover institutional shortfalls.[34]

CPO are NOT directly subject to the full scope of Part 190 bankruptcy rules as they are NOT classified as "futures commission merchants" or "clearing organizations" under the CFTC's definition. Therefore, CPO participates in portfolio compression exercises should be fully allowed. CPO chooses to engage in portfolio compression because it directly optimizes the fund's operational and financial metrics:

1. Staying within the CFTC De Minimis and Rule 4.7 Caps
   If a CPO operates under Rule 4.13(a)(3) De Minimis Exemption, it is subject to a strict 100% Notional Value Test. It cannot hold gross derivatives positions that exceed the liquidation value of the pool. Compression tears up dead, offsetting contracts, instantly shrinking the fund's gross notional size, and preventing the CPO from accidentally blowing past its exempt volume caps.
2. Maximizing FCM Capital Limits
   Even if a CPO is fully registered under CFTC Regulation 4.7 and has no statutory volume caps, its clearing broker – the FCM – is bound by strict global Basel leverage ratios. FCMs allocate limited "notional capacity" to their buy-side clients. If a CPO leaves dead, offsetting contracts open; it wastes its broker line. Compressing the trades frees up the line, allowing the CPO to put on new positions.
3. Eradicating Operational and Valuation Drag
   Every open derivatives contract requires constant administrative tracking, daily valuation reconciliation, and eventual legal documentation management. Compressing a complex portfolio of binary or swap options down to a lean, net-equivalent number of contracts drastically cuts operational overhead and minimizes the risk of valuation disputes between the CPO and its dealers.

Under **CFTC Letter No. 26-20**,[35] the Commission explicitly clarifies that portfolio compression exercises are completely exempt from the public trade-execution and real-time reporting mandates. Because compression simply closes out existing, pre-negotiated bilateral positions to mitigate risk, the resulting contract terminations are not considered "Arm's-length commercial trades." However, **maximum loss** for a direct retail participant on a "Direct Retail Clearing Platform" extends well beyond **100% of their active wagers**, encompassing **100% of the uninvested cash sitting idle in their platform account balance**.

[34] https://www.cliffordchance.com/content/dam/cliffordchance/briefings/2020/05/CFTC-Proposes-Reforms-to-Bankruptcy-Rules-for-Futures-Brokers-and-Clearinghouses.pdf
[35] https://www.cftc.gov/csl/26-20/download

Under CFTC Rule 4.20, a CPO's client assets must be held in a legally distinct trust account entirely separate from the operating company's capital. This **Isolated Custody** structure and the no action letter – "Trade Execution" **Safe Harbor** allows a CPO to run complex compression math internally without triggering exchange registration requirements. This relief applies as long as the compression purely nets out existing risk rather than creating brand-new, speculative market exposures. Because CPO requires 100% of the maximum potential payout to be deposited upfront, there are no debtors or creditors within the trading book. Therefore, even if a CPO-style prediction market performs portfolio compression immediately before insolvency, the maximum loss can never exceed the initial wager on the event contract.

A CPO can be **orderly wind-down** if it goes bankrupt. The matching engine software simply goes dark. A bankruptcy trustee or a court-appointed receiver steps in to audit the pool's bank account. Because compression cleanly pruned away the dead, offsetting contracts before the shutdown, the trustee is left with a highly organized order book. The trustee then executes a simple administrative wind-down: either returning the active, pre-funded wagers back to the users' bank accounts or settling the contracts based on the official, final data triggers. Prudential regulators need not worry about the "*Commercial Settlement Bank Contagion Loop*" or the FDIC's "Clearing Member Resolution Paradox", see page 13 of our July 31, 2026 comment letter to the CFTC.[6]

Full collateralization acts as an absolute circuit-breaker against systemic default

Portfolio compression is merely an accounting and ledger-cleanup tool. When layered on top of a 100% pre-funded architecture, it optimizes the operational speed of the database without expanding the risk envelope of the underlying contracts. A user can never wake up to an unexpected margin bill or a debt obligation that exceeds the cash they explicitly committed to the platform.

If a court determines that the CPO used the portfolio compression to intentionally wipe out the positions of corporate insiders or favored market-makers right before freezing the platform – while leaving ordinary retail investors trapped in uncompressed, illiquid legs – the bankruptcy court will void the compression. Under bankruptcy law, this is treated as a fraudulent conveyance or a voidable preference. The court will legally undo the compression, force the insiders' liabilities back onto the ledger, and redistribute the assets equally among all pool participants to preserve fairness.

Why the CPO Fiduciary Model Exposes This Fraud Faster Than a DCM

The CPO structure gives regulators a much heavier legal hammer to detect and stop a mirage than a traditional DCM exchange framework:

- **The Anti-Comingling Shield (Rule 4.20):** Under standard exchange rules, a market maker can clear trades using any corporate cash structure they want. But under CFTC Rule 4.20, a CPO is prohibited from co-mingling pool assets with the personal or corporate property of the operator. If a startup uses its parent corporate cash to fund affiliate bots that trade inside its own client pool, it commits an automatic, strict-liability federal crime from day one.
- **Independent Third-Party Custody Audits:** Traditional exchanges audit their own order books. A registered CPO is required to use an independent, third-party FCM or qualified custodian to hold the pool's cash. The custodian would immediately flag if 90% of the platform's "pre-funded volume" was coming from a single, centralized corporate banking source executing circular wire transfers.
- **The Personal Liability of Fiduciary Duty:** On a DCM, if an automated market maker widens its spreads or goes dark during a crisis, it is viewed as "*market forces*." Under Part 4 CPO rules, the operators have a personal, non-waivable fiduciary duty to the Pool's investors. If insiders deliberately deploy bots to manufacture a valuation mirage that damages retail participants, the executives face direct, personal criminal prosecution for fraud and breach of fiduciary trust, bypassing the limited corporate liability shield.

CPO Market Architecture Protections against circular loop

While a vertically integrated, "Direct Retail Clearing Model" is not a literal Ponzi scheme – because it is not built on a fraudulent ledger using new investor money to pay fake returns to old investors – it can exhibit Ponzi-like structural dynamics when trading volume is artificially circulated. If an integrated platform relies on an internal proprietary trading affiliate or AMM to buy and sell contracts against itself to fake volume, the system becomes a closed-loop liquidity trap. The CFTC and SEC**,** the **Interagency Risk Committee (IRC)** in particular, should NOT ignore these structural **blind spots**.

The direct-clearing DCM/DCO platform uses its internal bots to drive up trading activity and price actions, creating a ***Valuation Mirage***. Retail users see high volume, assume a contract has real fundamental depth, and deposit cash. Yet, even if every single contract is technically **100% pre-funded** under regulatory mandates, the underlying internal affiliate may be backing hundreds of highly correlated positions across the exchange using a single, centralized pool of corporate cash – introducing a structural layer of **Hidden Leverage**. If the platform deploys a flawed **portfolio compression** cycle to prematurely terminate or *"**flip**"* those offsetting internal bot trades, it artificially shrinks its reported *gross risk* metrics. When an operational hack occurs, this illusion of deep liquidity vanishes instantly. The platform cannot fulfill customer payouts because the actual settlement capital was trapped in a circular loop of internal affiliate trades, leaving direct retail participants holding nothing but an unbacked, illiquid ledger.

CPO market architecture addresses such liquidity circulation traps by:

1. Mandatory Affiliate Disclosure: Propose a rule requiring any CPO-style matchmaker to explicitly tag and publicly disclose any trades executed by internal or affiliated algorithmic accounts.
2. Strict Third-Party Liquidity Caps: Restrict internal platform bots from representing more than a minor percentage (e.g., maximum 15%) of the open interest in any single event contract pool, forcing the platform to rely on genuine, independent external market liquidity.
3. Real-Time Independent Ledger Verification: Utilize a decentralized, public ledger or an independent, live-audited cryptographic proof-of-reserve system to verify that the pre-funded capital backing every open contract is tied to a distinct, unique bank routing line, ensuring no single pool of corporate cash can be counted twice.

Data Reporting Requirements

We strongly disagree with the CFTC proposal on Data Reporting Requirements for certain Event Contracts.[6] The proposed "Parts 15-18 Routing Approach" for "*Direct Retail Clearing Model*" *conflated the legal boundaries between clients and counterparties*. We have reservations about requiring the DCMs and SEFs to obtain and maintain occupation and employer information for participants under the proposed CFTC §16.03(g). DCMs and SEFs are execution venues, not relationship managers. Client-facing brokers are the entities that directly onboard clients, manage margin accounts, and execute comprehensive KYC and AML checks. Requiring an exchange to independently collect, verify, and maintain sensitive employer and occupation data is highly duplicative. Unnecessary *data-in-motion* should be avoided.[36] CAT has set a bad precedent with significant privacy and security issues,[37] as well as civic concerns about Massive Government Surveillance.[38] We strongly recommend analysis of data at the original sources.

The alterations generate critical systemic blind spots across the broader financial network:

- **Interoperability Illusion:** The provision allowing a platform-native contract ticker symbol to serve as the UIC "*where practicable*" must be rejected. This approach deviates from the global **Unique Product Identifier (UPI)** standard[39] mandated by prudential regulators, creating a localized data silo that leaves macro-prudential supervisors blind to cross-border risk concentrations.
- **Information Silo:** Shifting data directly into the Part 16 futures framework feeds raw transaction records exclusively into the CFTC's internal databases. Prudential banking regulators in this are cut off from automated telemetry pipelines, creating an information gap that undermines the systemic safety mandates of Dodd-Frank Title VIII.

The foundational difference between the CFTC's large trader reporting system (**Form 102**) and the SEC's security-based swap tracking framework (**Schedule 10B / Form 13H**) is **by design** – the CFTC prioritizes on Systemic Liquidity and Macro Risk, while the SEC focuses on Corporate Fraud, Insider Trading, and Valuational Distortion.

The CFTC typically relies on an intermediate model to track how massive concentrations of contracts could squeeze physical delivery lines or distort macro price signals. Legacy futures commission merchants (FCMs) and clearing houses act as information funnels. They aggregate positional data and report it daily to the commission automatically when a generic volume ceiling is pierced.

The SEC's regulatory philosophy prioritizes capitalization, disclosures, and fair pricing of specific issuers. It utilizes a **self-disclosure model** designed to stop predatory accumulations. Schedule 10B was passed to combat manufactured credit events (e.g., artificial CDS defaults)[40] and hidden family-office build-ups (e.g. Archegos collapse).[41] It forces the **individual or group holding the position** to file a public disclosure through EDGAR within 24 hours of crossing a threshold.

The lack of alignment creates severe operational duplication and regulatory loopholes for modern platforms. The agencies must harmonize these reporting regimes for three critical reasons:

---

[36] https://www.databoiler.com/index_htm_files/DataBoilerInMotion.pdf ; When data is "at-rest" rather than "in-use," it serves no value other than one must pay for storage of the data. As data is redundantly stored on original data sources, then filter through broker-dealers' systems and at the CAT system and then is regurgitated in bulk to CAT users' systems, causing significant wastages.

[37] https://www.linkedin.com/pulse/cat-through-z-security-privacy-requirements-kelvin-to/

[38] https://cs.stanford.edu/people/eroberts/cs181/projects/ethics-of-surveillance/ethics.html

[39] https://www.databoiler.com/index_htm_files/DataBoiler%20Evolution%20ISIN%20UPI%20plus%20PKI%20DPKI.pdf

[40] https://www.klgates.com/By-Indirections-Find-Directions-Out-Credit-Default-Swaps-and-the-Hovnanian-Exchange-Offer-05-31-2018 ; https://www.dlapiperintelligence.com/investmentrules/blog/articles/2019/fca-follows-us-regulators-in-warning-firms-over-manufactured-credit-events-in-its-latest-market-watch.html

[41] https://www.sec.gov/Archives/edgar/data/1053092/000137036821000064/a210729-ex992.htm

1. Eliminating the "Data-in-Motion" Compliance Tax

   Requiring market participants to maintain dual reporting pipelines for identical economic events is highly inefficient. The SEC has recognized this data strain, recently extending its compliance safe harbor for certain cross-jurisdictional reporting metrics through November 5, 2029, specifically so it can evaluate how to further synchronize its rules with the CFTC's technical specifications.[42] Unaligned systems force FinTechs to burn capital wrapping disparate data sets just to hit "bare-minimum compliance".

2. Securing a Fit-for-Purpose Framework for Novel Derivatives

   The explosion of prediction markets and "*on-chain, automated systems*" has completely blurred traditional lines. For example, if a platform hosts a contract on an issuer's operational output (e.g., vehicle delivery counts), it triggers the hotly debated SEC "*Event Contract Prong*".[43] If the frameworks do not harmonize, a platform could technically clear its risk safely under CFTC rules but face immediate SEC enforcement for failing to publish personal, public Schedule 10B insider filings.

3. Recent Precedent: The CFTC is Already Streamlining

   The CFTC issued a Final Order to sunset Part 20 large trader reporting requirements for physical commodity swaps.[44] The commission explicitly found that routine, standalone position reporting was duplicative now that modern transaction-level databases (Part 43/45 Swap Data Repositories) are fully operational. This sunset sets a perfect precedent for the SEC to align its own position-limit and trade-data reporting rules.

Rather than forcing vertically integrated MTF-like direct-access platforms to build fragmented disclosure pipelines, the Commissions must abandon case-by-case exemptions and siloed views of the market. By leveraging the **Exposure to Cause versus Exposure to Effect (E2CvE) model**, if an event contract settles against a raw operational variable independent of market sentiment, it can be considered for an **Alternative Compliance Pathway** – exempting it from duplicative SEC reporting and preserving a unified, single-window telemetry stream under exclusive CFTC jurisdiction.

This alternative compliance pathway should be applicable to the fully collateralized Fiduciary CPO-Matchmaker Model that structured as a Delaware Series LLC, governed by an objective Five-Layer Behavioral Risk Taxonomy, and tracked via a modernized Pull-Subscription Market Tape aligned with the global **UPI** standard. This approach would reconcile platform efficiency with global systemic safety standards without violating the **Major Questions Doctrine**.[45]

CPO Data Reporting Requirements

In our envisaged CPO model, it operates as an integrated fiduciary pool rather than a multi-layered banking exchange, the reporting framework would look vastly different – and significantly leaner – than the complex swap reporting rules being debated under the joint RFC File No. S7-2026-21.

A. Eliminate Data Burden for fully collateralized CPO Model

Because every event contract is 100% pre-funded and has no leverage, the CFTC can eliminate the most burdensome real-time transactional reporting pipes mandated for standard swap dealers under CFTC Part 43 and Part 45:

- **No Valuation/Margin Messaging:** The platform does not need to report daily mark-to-market data, collateral haircut calculations, or variation margin adjustments because these metrics are permanently fixed at zero.

[42] https://www.eversheds-sutherland.com/en/united-states/insights/sec-extends-security-based-swap-reporting-requirements-safe-harbor-to-2029
[43] https://www.davispolk.com/insights/client-update/sec-and-cftc-consider-updating-derivatives-classification-rules-innovative
[44] https://www.federalregister.gov/documents/2026/07/21/2026-14710/order-sunsetting-certain-large-trader-reporting-requirements-for-physical-commodity-swaps
[45] https://www.supremecourt.gov/opinions/21pdf/20-1530_n758.pdf ; https://www.congress.gov/crs-product/IF12077

- **No Real-Time "Block Trade" Dissemination:** Since there is no risk of a large transaction triggering a systemic Market-Maker default loop, microsecond-level public trade routing feeds are unnecessary.

B. The 3 Core Reporting Fields the CFTC Would Mandate

To catch the "*Valuation Mirage*" and ensure structural safety, the CFTC would replace standard swap data fields with three targeted reporting metrics:

1. Unique Entity and Origin Identification (Exposing the Bots)

   Every participant and automated account would be required to hold a standardized Legal Entity Identifier (LEI) or a platform-verified token. The CPO would be mandated to report on the beneficial ownership of both sides of every matched trade. This immediately allows CFTC data analytics to flag if a single corporate entity or its internal affiliates are trading with themselves in a circular loop to manufacture fake volume.

2. Cryptographic Proof-of-Reserves (Verifying the Pre-Funding).

   To ensure the platform is not using a single pool of centralized corporate cash to back hundreds of correlated positions simultaneously, the CPO would face mandatory, time-stamped collateral balance reporting. The platform must report its open interest paired with a live balance feed from its independent, third-party custodian. If the total required pre-funded payout ledger ever exceeds the actual cash held in the isolated trust account, an automated regulatory red flag is triggered.

3. Net vs. Gross Compression Audits

   Whenever the platform runs a portfolio compression cycle to terminate or "*flip*" offsetting contracts, it would be required to log the event with a registered SDR. This prevents one from using compression as a regulatory eraser to secretly hide massive internal risk accumulations. The report would need to explicitly list:

   I. The Gross Notional Exposure before the compression cycle.

   ii. The exact Net Position remaining after the contracts are torn up.

   Iii. The identities of the accounts that participated in the compression.

Recommended 3-Layers Approach:

Transactional logs, beneficial ownership data, and portfolio compression histories sent to an SDR

By mandating a lean, identity-and-collateral-focused reporting stack under a modified version of CFTC Rule 4.22, the regulator gains the precise visibility it needs to stop fraudulent wash trading and algorithmic manipulation,[46] while this CPO model avoids the crippling compliance costs of a traditional multi-tiered DCM-DCO architecture. Instead of using the ultra-complex, multi-tier data fields designed for credit default swaps to require all swap data must legally hit an SDR under the joint RFC File No. S7-2026-21, the CFTC would establish a dedicated "*Event Contract Data Bucket*" within the existing SDR framework. The CPO platform would stream its lean data payloads (LEI origin IDs, pre-funded confirmation timestamps, and compression logs) directly into this bucket via an automated API pipeline.

The Financial Audit Path: The National Futures Association (NFA)

Because the platform operates legally as a CPO, its financial stability and collateral balances must be reported to the asset-management regulator - the NFA. The independent third-party custodian holding the pre-funded cash would be required to push a daily balance verification feed into the NFA's WinJammer system. The CFTC and NFA's automated surveillance software would continuously cross-reference the live open interest reported to the SDR against the actual cash reserves logged in WinJammer. If a platform tried to run a "Valuation Mirage" using unbacked, circular corporate cash, the mismatch between the SDR contract log and the WinJammer cash balance would trigger an immediate regulatory alert.

[46] https://www.cftc.gov/media/14461/MisleadingDeceptivePractices073026/download

The Front-Line Layer: Real-Time Public Disclosure Feed

As a core condition of its modified CPO exemption, the platform would be required to maintain a publicly accessible, real-time data API. This feed would broadcast the platform's live aggregate order book, the exact percentage of volume driven by internal affiliate bots vs. organic retail users, and an encrypted Cryptographic Proof-of-Reserves ledger.

Further strengthening market integrity and enhancing regulatory oversight with a bot-free, 100% pre-funded, fiduciary-backed CPO prediction market model

By segmenting the data per the above three-layers approach, the CFTC gets the deep, auditable trails it needs to prosecute fraud behind the scenes, the NFA ensures the cash is locked away safely, and retail consumers get the immediate transparency needed to see through an artificial liquidity mirage before depositing a single dollar. Yet, the SDR becomes a cybersecurity honeypot like the **vulnerability of the Consolidated Audit Trail** (CAT).[47] To address the confidentiality and privacy issues and further streamlining the CPO data reporting requirements if the platform can agree to a ban on internal affiliate bots:

1. **Independent Third-Party Market Makers:** Instead of running secret internal bots, the platform signs open, transparent agreements with reputable, independent, third-party liquidity providers (like specialized trading firms or market makers). These firms bring their own capital, trade via the public API just like everyone else, and are prohibited from sharing data or pools with the platform itself.
2. **Organic Hedging Demand:** Because this platform operates as a secure, fiduciary-backed parametric insurance vehicle, it attracts real-world commercial hedgers. A local business or a supply-chain manager does not need high-frequency day-trading liquidity; they just need to know that when they buy a contract to lock in a hedge, their capital is 100% pre-funded and legally protected from platform insolvency.

Module 1: Splitting the Transactional and Identity Layer for Privacy Protection

This module replaces traditional, bloated swap data reporting by splitting market mechanics (***track 1****: the public market data feed*) from participant identity (***track 2****: the automated identity gateway - a variant to the FINRA's EBS system*). By decoupling high-speed transactional data from sensitive identity infrastructure, this CPO model slashes engineering costs to implement a lean data reporting architecture using simple web APIs and JSON schemas, while providing regulators with absolute, un-manipulable market transparency.

A bot-free prediction market can streamline its technical reporting stack through Low-Volume API Push (No More High-Speed Egress Fees) and Clean Audit Trails (Zero Wash-Trading Complexity). Track 1 can be a subscription-based model, where the platform eliminates the engineering and compute overhead of constantly packaging, formatting, and actively pushing massive data streams to an SDR server. Instead, the platform opens a read-only, high-performance API gate, and the CFTC and NFA connect their own cloud infrastructure to the endpoint to conduct the analysis. If the ingestion node crashes, the regulator simply reconnects its subscription whenever its internal nodes are back online while the platform keeps running seamlessly.

The sensitive regulatory metrics, including client LEIs, true retail beneficial ownership information, and the mandatory Anti-Bot Certification (certifying neither party is an internal platform affiliate). This data is never streamed continuously. Instead, if the CFTC's market-surveillance software flags a trading anomaly on the public tape, the regulator triggers an automated, electronic information request (the summon) to the platform's gateway. The platform's automated engine maps the requested Execution Tokens to the true user accounts and response with a secure, compressed identity package back to the CFTC Division of Enforcement.

[47] https://www.databoiler.com/index_htm_files/DataBoiler%20SEC%20CAT%2020260622.pdf

Module 2: Cryptographic Proof-of-Reserves (The Escrow Balance)

Because this model requires 100% pre-funding, standard mark-to-market and margin fluctuation fields are obsolete. This module proves absolute platform solvency. The platform aggregates live Open Interest (the maximum potential payout of all live wagers on the ledger), and the actual Cash Balance held in Trust (Cash in Escrow ≥ Platform Liability), reporting to the NFA's WinJammer Portal. To prevent the platform from fabricating or double-counting assets, the data is pushed directly by the independent, third-party custodian bank (a qualified Federal Reserve member bank) rather than the startup itself. The NFA's automated ledger-lock system continuously cross-checks this cash feed against the live open interest logged on the CFTC's public tape.

This approach maximizes consumer protection and satisfies the transparency mandates in the joint proposal. The platform replicates a subset of this data to the public. A bot-free, 100% pre-funded, fiduciary-backed CPO prediction market maintains a free, open Public Disclosure API that mirrors the anonymous transaction tape from Module 1 and the aggregate solvency metrics from Module 2. This Self-Auditing Public Safe Harbor allows independent market participants to self-audit the platform, verifying with absolute mathematical certainty that the market's liquidity is driven by genuine organic flow and backed by real dollars sitting safely in a regulated bank vault.

Module 3: Portfolio Compression Summaries (Ledger Integrity)

This module ensures that the platform cannot use portfolio compression as a regulatory eraser to hide massive risk concentrations or wipe out internal trading discrepancies. Comprehensive summaries generated at the conclusion of every risk-neutral portfolio compression cycle. This includes the Gross Notional Exposure terminated, the lean Net Exposure remaining, and the specific Execution Tokens of the independent market participants who initiated the netting event. A specialized, streamlined "Event Contract Bucket" within a registered SDR (such as the DTCC Data Repository or ICE Trade Vault). By using a dedicated, single-purpose bucket inside the SDR, the CPO avoids the hundreds of blank institutional fields required for complex interest rate or credit default swaps, logging instead a clean, net-risk accounting sheet.

Overcoming Prudential Regulators' Concerns

Under Title VIII of the Dodd-Frank Act, the FSOC has the authority to designate critical clearinghouses as *Systemically important financial market utilities* (SIFMUs).[48] Once a clearinghouse achieves or threatens to impact macro-stability, the Federal Reserve Board of Governors gains backstop supervisory authority alongside the CFTC. The FSOC focuses on three macro-metrics: (a) the *Common Clearing Member Overlap Index* (CCMOI); (b) the *Settlement Bank Interconnectedness Ratio* (SBIR); and (c) *Net-to-Gross Exposure Ratios and Compression Tracking*.

Instead of holding the CPO's master escrow cash at a single commercial bank, the platform should partner with an independent, qualified trust company that utilizes an **Insured Cash Sweep** (ICS) network (such as IntraFi). When retail users deposit pre-funded cash, the network automatically breaks up and distributes the funds into standard, FDIC-insured buckets of $250,000 across hundreds of distinct Federal Reserve Member Banks. By operating under an automated Tri-Party Custody and Escrow Agreement, the holding banks handle the underlying movement via the Fedwire Funds Service. This structure neutralizes the FED/OCC's capital-concentration alarm. It ensures the capital remains safely locked inside the supervised banking perimeter, transforming the ledger from a "*shadow bank*" into a transparent mirror of fully compliant bank deposits.

FinCEN's core fear is that internal, peer-to-peer portfolio compression cycles could be weaponized by bad actors to disguise the trail of illicit capital. Therefore, the platform must mandate that users can only deposit and withdraw cash

[48] https://www.brookings.edu/articles/what-if-a-clearinghouse-fails/

through a linked, verified US bank account that has cleared comprehensive automated Know Your Customer (KYC) and Anti-Money Laundering (AML) checks at the onboarding gate for strict Bank Secrecy Act (BSA) compliance.

To prove that compression is not being used as a mixer, the platform's internal software must log an un-alterable, audit-ready "*Invariant Risk Path*" for every contract. When a compression cycle tears up an offsetting position, the software must programmatically attach the original user identity tokens to the resulting net positions. If FinCEN deploys an automated query via the earlier mentioned EBS Gateway, the system should unroll the compression cycle and show the exact, linear path of every dollar from the moment it was deposited to the moment it was compressed, eradicating any anonymity loophole.

When FSOC aggregates CPO risk metrics, the primary alarm trigger is unbacked leverage (gross exposure massively exceeding net cash). Because this CPO prediction market model enforces a hard-coded, 100% pre-funded escrow rule, the Gross Notional Exposure will always perfectly match the Cash in Trust. On the regulators' macro risk dashboards, the platform will register zero systemic leverage footprint. In the later discussed Series LLC model, it bypasses the FCM tier and holds capital in non-leveraged, distributed FDIC insured cells. The aggregated risk of this platform should fall beneath the systemic concern / form PF thresholds (currently set at $10 billion) of the Fed and FSOC. In turn, the platform cannot cause a credit chain-reaction if the market experiences an extreme economic shock.

Operational Efficiency without the IRS K-1 Tax Bottleneck

By law, a CPO is an asset aggregator. Its participants are legally designated as partners or beneficial owners of a fund. Therefore, at the end of every fiscal year, the CPO must issue an incredibly complex Schedule K-1 tax form to every single investor, tracking their proportional share of the pool's capital gains and losses. For an exchange model with thousands of retail traders making $1 wagers, generating individual K-1 partnership forms is a complete operational impossibility. Traditional prediction markets issue simple 1099-B forms for capital gains, which is only legally permissible for exchange-traded contracts. Forcing a retail platform into the CPO tax reporting bucket would trigger IRS compliance friction.

Instead of organizing the CPO pool as a standard single partnership, structure the vehicle as a specialized Delaware Series LLC or a Series Trust. Under IRS regulations, individual cells within a Series LLC can be legally classified as disregarded entities or separate tax units. By explicitly drafting the platform's User Agreement to state that each retail user's account functions as an isolated, self-contained "*series cell*" that never shares profits, losses, or capital appreciation with any other user in the pool, this breaks the legal definition of a partnership. This structure allows the platform to legally avoid K-1 distributions entirely. Instead, the platform can cleanly report earnings under the standard, automated Form 1099-B (Barter and Exchange Transactions), or Form 1099-MISC framework, treating payouts as individual parametric contract completions rather than fund partnership distributions.

The fiduciary duty remains fully intact and is strengthened under this model. Because the platform still falls under the definition of a CPO, it is bound by CFTC Part 4 statutory fiduciary duties. The platform is legally barred from co-mingling pool assets, front-running client positions, or operating conflicting internal trading bots. Also, under Delaware law, the managers of a Series LLC owe a traditional fiduciary duty of loyalty and care to the members of each individual cell. If platform operators deploy a flawed portfolio compression cycle that favors corporate insiders over the retail cells, they can be sued directly for breach of corporate fiduciary duty, entirely bypassing the standard corporate liability shield.

Through a programmatic pre-fund (Cell-to-Escrow), the full maximum potential payout is placed into an isolated Escrow Trust Account backed by the IntraFi distributed bank network. Because the Series LLC structure dictates that the debts and liabilities of one cell cannot touch another, the backing this trade can never be seized or cross-collateralized to cover an operational issue or a massive hack affecting other cells on the platform.

When the real-world event occurs, the platform's independent, hard-coded **Third-Party Oracles** ingest the data. The oracle validates the outcome and signs the settlement contract within our recommended "Cooling-Off Windows" (a 2-to-24-hour buffer window for contested inputs before distributing payouts to keep settlements anchored to verified facts). The signed oracle trigger automatically releases the payout fund from the escrow trust directly into the winning user's cell wallet. The cell then pushes an automated clearing house (ACH) or Fedwire instruction to move the cash back to the user's personal bank account. This payout is legally treated as an individual, binary contract completion rather than a fund partnership distribution. The platform's software automatically logs the transaction and aggregates it at year-end into a standard Form 1099-B.

Macro-Prudential Alignment and Market Monitoring

Unlike securities markets defined by continuous ***price discovery***, trading in Prediction Markets function as short-lived exposures to the "*cause*" while Options and SBS provide exposure to the "*effect*." The beauty of simultaneous hedging strategies is the **decoupling** of **Event** and **Price Risk**. For example, one can buy a "*No*" contract on a prediction market for a Federal Reserve rate cut while simultaneously buying 0DTE SPX calls. If the cut happens, the 0DTE calls likely surge. If the cut fails to happen, the "*No*" contract payouts offset the loss of 0DTE premiums. Yet, the "**decoupling**" breaks the direct causal link traditional models rely on to identify manipulation.

In Prediction Markets, the "**asset**" is a **forecast**, meaning the value shifts based on ***information velocity*** rather than just *buying/selling pressure*. There is NO *fundamental value* of an "**asset**" to compare related order flow if it might or might not cause a price bias (e.g., spoofing). The "***worth***" of a contract is a **probability**. A massive trade might NOT be a "*bias*" or manipulation. It could be a substantial player acting on a genuine information edge. Using *price-based metrics* alone CANNOT distinguish *permissible* activities and from a *prohibited* manipulation attempt.

Traditional surveillance uses "*Z-score*" anomalies to flag *spikes*.[49] However, decoupled risks introduce noise. A price shift often happens in response to **alternate data**[50] rather than internal trade mechanics. A gradual deterioration of odds (*chronic*) and sudden anomalies (*acute*) caused by *misinformation campaigns* or the use of Material Non-Public Information (MNPI) are not easily distinguishable even after the fact. High capital **concentration** can move prices faster than official news **disclosures**, especially in "*thin*" markets with *low liquidity*. Small, legitimate trades can look like aggressive manipulation (*price bias*) under traditional rules, leading to a flood of **false positives**.

The CFTC's current proposal[17] to force exchanges to independently gather employee and occupation data completely breaks the dual-tier architecture established under CFTC Rule 166.3 and Part 38 Core Principles. Surveillance is intended to be a **concerted effort**: the broker isolates, records, and containerizes client communications under banking-grade privacy laws, while the exchange monitors anonymous order flow. By utilizing CFTC Rule 38.254, the exchange can already summon employee and occupation data, beneficial account information, etc. upon detecting an anomaly. Forcing an exchange to continuously store this data in motion turns execution venues into cybersecurity honeypots like CAT. We recommend the Commissions to:

- **Mandate Concerted Surveillance via Tiered Semantic Insider Tracking:** Update §40.11 and Part 38 to require prediction market platforms to orchestrate a coordinated surveillance architecture with client-facing brokers, utilizing the statutory information-sharing vectors under CFTC Rule 38.254. Under this joint framework, the execution venue provides a Tier 1 Agentic AI layer to continuously monitor anonymous transaction feeds for operational anomalies. Concurrently, the client-facing brokers—who are already required to conduct KYC/AML and collect employee data

[49] https://arxiv.org/pdf/2308.08683
[50] https://corpgov.law.harvard.edu/2024/04/23/alternative-data-a-coso-perspective/

under Part 1 rules—must maintain a Tier 2 Audit Trail Hub semantic database. This Tier 2 database must be architected to summon relevant participant identities when a Tier 1 automated surveillance node flags a specific symptom of suspicious market activity. See our Blueprint design in later section.

The broker containerizes, records, and extracts omni-channel business communications under strict SEC Rule 17a-4 and FINRA Rule 3110 guidelines using eSIM mirroring or secure work applications. The exchange then leverages its information-gathering rights to access this data upon anomaly detection, rather than continuously moving unencrypted data in motion. This tiered approach effectively maps MNPI to specific individuals without intruding upon consumer privacy or transforming exchange databases into vulnerable cybersecurity honeypots.

- **Leverage DCOs for Migration**: Mandate that DCOs act as the back-end validators to track macro-level asset flights to offshore platforms.
- **Audit Event-Adjacent Incident Referrals**: Require exchanges to incorporate multi-tiered surveillance metrics from third-party monitors and sports leagues to track and log real-world match-fixing, DDoS infrastructure sabotage, and oracle tampering.
- **Submit Narrow-Outcome Influence Scores**: Require exchanges to provide mathematical risk scores, mapping out exactly how easily an insider or a small group of decision-makers can manipulate a niche contract.
- **Adopt the Whelan Approach**: Utilize the empirical Whelan Paper[26] approach annually to calculate trading frictions and clear out the favorite-longshot biases that systematically exploit retail traders.

With reference to the Enhanced Fiduciary CPO Model registers a net-zero risk signature across all four prongs:

1. It eliminates credit concentration by operating without an FCM margin tier.
2. It exhibits zero leverage because gross notional exposure perfectly mirrors cash-in-trust.
3. It carries zero redemption/fire-sale risk due to 100% upfront pre-funding.
4. It avoids artificial market footprint concentration by banning internal affiliate bots.

This justifies the exclusion of such CPO from the four core-metrics of Prudential regulatory oversight monitoring for typical private funds: *Counterparty Credit Exposure, Leverage Multiples, Liquidity/ Redemption Profiles,* and *Asset Class Concentration*. Still, a CPO Matchmaker model should continue be subjected to our suggested **Operational and Technological Safeguards**:

- **Mandate Cooling-Off Windows**: Establish a 2-to-24-hour buffer window for contested inputs before distributing payouts to keep settlements anchored to verified facts.
- **Deploy Supervisory AI**: Proactively integrate machine learning and automated text-analytics to parse self-certified filings, flag ambiguities, and group similar contracts to assist the DMO review.
- **Enforce Algorithmic Risk Simulations**: Require platforms utilizing AMMs to programmatically prove their routing architectures naturally prevent spread widening, oracle manipulation, and front-running by preferred market makers.

We respectfully request that the Commissions integrate this alternative compliance and data reporting framework into the final Title VII harmonization rules. This framework provides the Commissions with deep, automated visibility to prosecute fraud, keeps American capital within the supervised banking perimeter, and provides consumers with an ironclad, fiduciary-backed hedging vehicle without crippling FinTech compliance budgets.

COMPLIANCE – Collective Efforts

Prediction market participants can directly influence the real-world outcomes to influence sentiment in a much larger, related equity or commodity market. Director Miller is spot on, in laying out the following CFTC Enforcement priorities for Prediction Markets: [51]

(1) Insider Trading – Section 4c(a)(4) of the CEA "*Eddie Murphy Rule*" on those government employees who hold material non-public information (MNPI), and those who trade on or tip others with misappropriated information;

(2) Market Manipulation – spoofing, wash trading, and geopolitical events "*tempting to would-be manipulators*" on commodity price that can have broad inflationary effects, such as energy costs ripple through the economy;

(3) Disruptive Trading – to prevent or limit large, erroneous, or cascading price swings that can occur due to events such as flash crashes, incorrect order entries, illiquid conditions, or the impact of very large orders, especially during a closing period that reduces efficiency, distorts price signals, and can raise prices;

(4) Retail Fraud – Ponzi schemes, "*pig butchering*" schemes, impersonation fraud, and phishing attacks targeting at-risk populations; and

(5) Willful AML/KYC Violations – combatting terrorism, narcotrafficking (growing, producing, transporting, smuggling, and selling controlled substances), fraud, and other serious illegal activity.

Please see our response to Annex 1 – Q14, maps the specific actions necessary to address these enforcement priorities.

To curb illicit activities in both traditional securities and futures markets as well as prediction markets, legacy surveillance systems must be upgraded or replaced with more powerful AI **machine learning** and **simulation** techniques. It would need to assess profile (check for consistency if anyone may act out of character), gauge RENTD, and reveal **trade intents** through onset signals detection that consists of, but not limited to, multi-dimensional analysis, simulation back-testing in reconstructing not only the trade sequence but also the dynamics, back-stop assurance for synthetic created trades, etc. For example, beyond life of hedge is a "***trigger***" of concern. Any single "***trigger***" may not be a violation; however, the legitimacy of trade activities may be challenged if they occur in an order resembling *a set of triggers* (***pattern***) in the lessons database. Data Boiler pioneered in accurate detection of onset signals / trade irregularities at accelerated speed and more tolerable to unsynchronized clocks/ timestamp issues with related patents that claim priority since 2014. [52]

To enrich surveillance functionalities against **bot-driven** fake accounts, misinformation, and catch alleged misuse of MNPI, it is essential to build partnerships with online platforms and communication infrastructures to track suspects' digital trails of where, when, and with whom. Public-Private partnership (e.g., CISA's IEP) should be encouraged.[53] Connecting the **intelligence community**, including FinCEN, TFI, and other law enforcement and intelligence agencies, such as the Egmont Group of 100+ FIUs[54] domestically and internationally. Deterring fraudsters and adversaries requires diverse, collective efforts rather than bureaucracy.

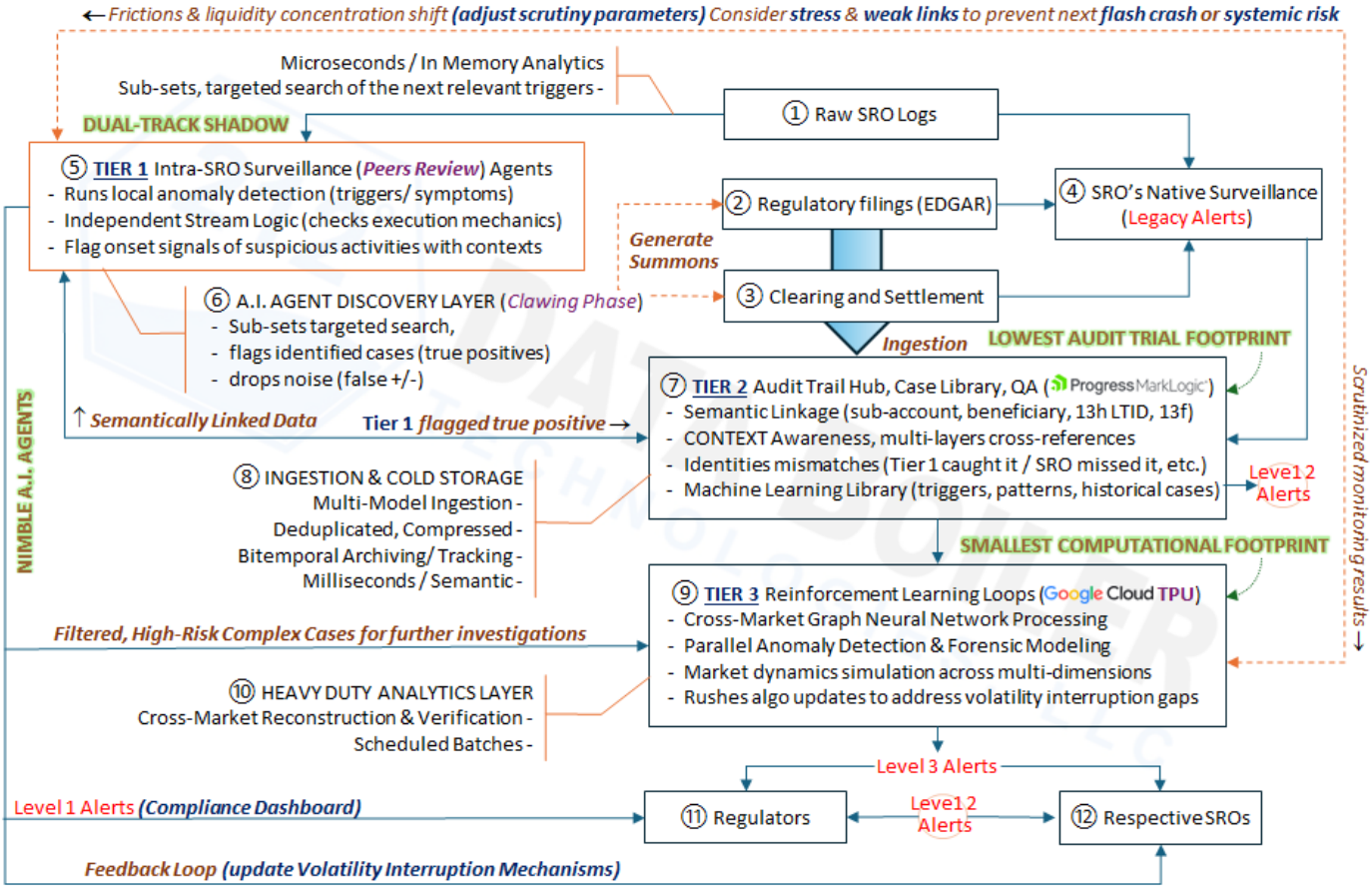
Consolidated Audit Trail (CAT) is incompatible with Vice President JD Vance's remarks about *"American AI will not be co-opted into a tool for authoritarian censorship."*[55] Congress confers the authority to the Department of Commerce to

[51] https://www.lw.com/en/insights/new-cftc-enforcement-director-speaks-on-priorities-insider-trading-in-prediction-markets-and-coop
[52] https://www.databoiler.com/products.htm
[53] https://www.cisa.gov/news-events/news/cisa-launches-new-platform-strengthen-industry-engagement-and-collaboration
[54] https://egmontgroup.org/faqs/
[55] https://www.presidency.ucsb.edu/documents/remarks-the-vice-president-the-artificial-intelligence-action-summit-paris-france

conduct census, NOT the SEC. We hope CFTC can heed the lesson to avoid intruding privacy[56] and prevent ***functional creep***.[57] Be creative and use decentralized edge computing to examine **alternative** and **meta data** for **context awareness** intelligence gathering to achieve Director Miller's five enforcement priorities.

To create an anonymized, cross-market, cross-asset class forensic tool in fulfilling the post-2010 Flash Crash Congress's mandate, CAT's replacement must be nimble and effective with **agentic AI**, Model Context Protocol (**MCP**) to connect and orchestrate workflows across systems, Retrieval-Augmented Generation (**RAG**) for knowledge retrieval to avoid wasting tokens on hallucinations, and surround both with **Zero-Trust** cyber defense to safely manage what the AI can see and do. Please see below for our schematic drawing, collectively these components form the "layers of intelligence" to address the challenges of today and the future.

See **Annex 2** on page 52-60 of our June 22, 2026 comment letter to the SEC on CAT for an elaborate discussion our design for a **Distributed/ Federated, Event-Driven Agent Topology**. In short, the surveillance routine into – **TIER 1** Intra-SRO Surveillance (***Peer Review***) Agents → ⑤ in the drawing; **TIER 2** Audit Trail Hub, Case Library, Quality Assurance for macro-filing lookup → ⑦; and **TIER 3** Reinforcement Learning Loops for cross-market Tensor Processing Unit (TPU) verification (include reverse engineering of portfolio compression to gauge where risks may shift) → ⑨.



Our proposed architecture seeks to minimize the audit-trail footprint, reduce computational load, eliminate unnecessary trade reporting, and shift regulators from manual data processors to strategic gatekeepers. It emphasizes context-aware

[56] https://www.linkedin.com/pulse/privacy-security-concerns-cais-cat-consolidated-audit-kelvin-to-yqoee/
[57] https://www.schneier.com/blog/archives/2010/02/security_and_fu.html

AI, Zero-Trust security, and selective ingestion of only high-value, anomaly-linked data. The system is designed to accelerate anomaly detection, reduce false positives, and identify emerging liquidity stresses or flash-crash precursors in real time. This three-tier distributed design eliminates CAT's honeypot vulnerabilities, reduces alert fatigue, and matches the pace of modern, cross-market manipulation by isolating identities and patterns across venues.

Our recommended 3-Tier Distributed Architecture shifts surveillance from hindsight to active prevention, enabling dynamic recalibration of guardrails and volatility controls. By storing only anomaly-linked data and offloading heavy computation to targeted TPU jobs, the architecture cuts CAT's cloud-hosting costs by an estimated 70–80% while delivering far stronger security, privacy, and analytical capability than any centralized repository could achieve. Regulatory market monitoring ought to be modernized alongside market and technology evolutions (Agentic Overlay). The goal is to holistically assess changes in *market dynamics*, understand where *frictions* and *liquidity concentration may shift* at rapid pace, or consider stress and weak links where the next *flash crash* or *systemic risks* may emerge in order to develop mitigation protocols with more effective and timely **volatility interruption mechanisms**.[58]

Reference to our response to question 12 on page 22 of our July 31, 2026 comment letter to the CFTC,[6] receiving CEA §16.01 and §16.02 data in lieu of part 45 swap data is grossly insufficient for surveillance detection of *inside-trading*. It takes concerted efforts between exchanges and the client-facing brokers, and involving the use of advanced voice surveillance (e.g. NICE Actimize covers emails, chats, voice calls, texts, social media, and unified communications).

Pursuant to SEC Rule 17a-4(b)(4), broker-dealers must preserve all communications relating to their *"business as such"* for a minimum of three years. To comply with SEC Rule 17a-4 and FINRA Rule 3110 while permitting *"Bring Your Own Device"* (BYOD) personal cell phone use, broker-dealers utilize containerized work apps, eSIM/Dual SIM virtual numbers, or network-level carrier mirroring to isolate, record, and extract business communications **without intruding upon privacy**. Crucially, the scope of this assessment must evaluate both what constitutes Material Non-Public Information (MNPI) and which individuals possesses it. However, the current proposal lacks the necessary data quality and granularity to effectively perform this function.

Nevertheless, **whistleblower programs** are critical components in the fight against insider trading, market manipulation and other fraud or deceptive trading practices. Virtu agreed to settle with SEC concerning customer data in December 2025 which indeed leveraged the help of a whistleblower. To some extent, Prediction Markets are like running these whistleblower programs by monetizing private information to uncover hidden corporate or financial truths, though they differ fundamentally in execution, legal framework, and reward mechanics. Both systems operate on the principle that crowds or insiders possess vital data that traditional oversight fails to capture.

> Whistleblowers receive bounties, while traders in prediction markets profit by backing accurate outcomes. Both mechanisms bypass traditional corporate hierarchies. They source critical, uncompromised data directly from frontline actors or observers. Both concepts aim to lower data asymmetry. They force hidden corporate malfeasance or true organizational risks to reflect in public realities. Differences between whistleblower programs and prediction markets are the wagering of bets, anonymity protections, the payout source and legal framework (e.g. anti-retaliation), etc.
>
> Policy makers may use this Whistleblowers analogy to consider where to draw the line(s) for Prediction Markets:

[58] NOTE: **Volatility interruption mechanisms** (e.g., replacing Single-Stock Circuit Breakers with the LULD Mechanism; overhauling Market-Wide Circuit Breakers; banning Stub Quotes and regulating Market Maker obligations; standardizing *"Clearly Erroneous"* trade executions) were piloted or implemented before the Congress' CAT mandate in 2012. The subsequent transitioning from *"pilots"* to permanent laws was a natural progression. Credits should be given to Reg. SCI that mandates all major proprietary trading firms and broker-dealers to participate in at least one coordinated cross-market Level 1 and Level 2 circuit breaker test per year.

(a) **Pricing Corporate Fraud:** Corporate employees can short their company's stock or buy "fraud occurred" binary contracts on decentralized prediction markets. This action drives down the market price, signaling internal distress to external regulators before formal investigations launch.

(b) **Eliminating Bureaucratic Friction:** Whistleblower programs require lengthy agency investigations, formal vetting, and multi-year legal proceedings. Prediction markets bypass this regulatory timeline by providing immediate financial payouts the moment a contract settles based on verifiable public data.

(c) **The Insider Information Paradox:** While whistleblower programs actively encourage insiders to step forward, prediction markets face severe legal hurdles regarding insider trading. Trading on material, non-public information on a regulated market can lead to direct enforcement action by the SEC or CFTC rather than a financial reward.

The key policy considerations therefore are:

Permissible Activities: Aggregating Divergent Insights

- **Expertise-Driven Analysis:** Trading based on specialized knowledge, such as an epidemiologist predicting FDA trial timelines using public filings, or a supply-chain expert predicting semiconductor shortages.
- **Aggregating Fragmented Public Data:** Collecting, synthesizing, and trading on information that is technically public but scattered across localized reports, foreign-language feeds, or court dockets.
- **Corporate Macro Betting:** Allowing external analysts or competitors to trade on general corporate health, industry distress, or broader sector-wide compliance trends.

Prohibited Activities: Market Manipulation and Theft

- **Misappropriation of Non-Public Data:** Trading on precise corporate metrics before they are public, such as an accountant betting on the miss of corporate earnings or an engineer betting on a product delay.
- **Incentivized Sabotage:** Banning trades where the participant has the power to directly cause the outcome, they bet on (i.e. *"Gaming"* is the game itself, and we applaud the Commission on the Definition of Gaming).
- **Bypassing the Regulatory Sequence:** Prohibiting individuals from trading on government actions before they are announced, such as a clerk betting on a supreme court verdict or a regulator betting on an enforcement action.[59]

Create an "Enforcement Safe Harbor"

If an insider discovers corporate fraud, they should be legally barred from profiting by shorting or betting against the company on a prediction market. Instead, policymakers should require them to route the tip through the SEC/CFTC whistleblower programs. This channels corporate truth-seeking into structured legal remedies rather than chaotic, anonymous market sell-offs.

Authenticating who is who, who is doing what, where and when via Decentralized Public Key Infrastructure Metaverse is good, but insufficient.[60] 21st century's challenges or "*chaos*" include: content moderation versus censorship, rogues hop around, "**Street Kids**" uprise with MEME stock phenomenon, digital "**Nomads**" could care less about ethics (conflict and the use of predictive data analytics), "**Corpo**" rent seeks in the Cyberpunk era, and/or allegedly cahoots activities. It is a race against hackers, bad actors and foreign adversaries. Today's algorithms are improved through **Crowd collective intelligence**, which **Prediction Markets are an integral part tied to the broader intelligence ecosystem**. It addresses limitations with any standalone silo algorithm.

[59] https://www.marketplace.org/story/2026/04/07/could-trading-places-help-regulate-prediction-markets
[60] https://www.linkedin.com/pulse/improving-trust-amid-race-technologies-kelvin-to-8vxrc/

Humans are slow and CANNOT manually reconcile the massive volume of structured trade logs and unstructured data driving modern markets. AI bridges this gap by handling tedious data ingestion and synthesis. Supported by human context, institutional knowledge, and strict guardrails, AI acts as a force multiplier – not job replacement. This shift elevates agency personnel from manual data processors to strategic gatekeepers of market integrity.

Learn, **unlearn**, and **relearn** – dynamic upgrades make the overall system smarter and more resilience than ever. Given the massiveness to create an **intelligence network**, where every jurisdiction or faction (including Pepe, Grassroot Unions, Anonymous Fawkes) is in the race. Some adversaries may get sponsorships from Sovereign Regime. In order for the US to remain on top of the world, be **creative**[61] is the key.

CAPITULATION – Unwavering recognition of higher authorities

True wisdom cannot be bought, measured, or traded for any earthly treasure, no matter how rare or pure. The "*price*" of wisdom is NOT just about its cost, but its **origin**. While participants (**Makers**, **Takers**) can mine alternative and meta data through AI and other means, they cannot "*manipulate*" the event outcomes (blind person and an elephant + randomness and serendipity). Recognizing the originality of "***real signals***" with **a Sovereign Information Hedging Utility (SIHU)** that aligns everyone's "*selfish*" interests toward a "*collective*" public good, see our April 30, 2026 comment letter to both Commissions on ANPRM to regulate Prediction Markets and Roundtable on Options Markets Structure Reform for details.[3]

CFTC authority under §2(c)(2)(D) of CEA and COMEX Rule 7 help curb and mitigate situations such as the *Monex case*,[62] *retail metal fraud cases*,[63] and *Silver Thursday event*.[64] This reflects an unwavering recognition that the CFTC's word is final. Regarding to what extent is **soliciting crowd wisdom** from DCMs or be limited only to the professionals at SEFs? At what point does the continuing collection of probabilities to an event be a detriment rather than helpful to relevant authorities, sports leagues, and governing bodies and in turn, the public?

There is no single party in a better position than the relevant authorities that have *skin in the game* to make that judgement in answering the above questions. Operating a prediction market (DCM, SEF, or CPO Matchmaker) is always **a privilege rather than a right** conferred by the CFTC, which the CFTC has explicitly entrusted relevant authorities, sports leagues, and governing bodies for co-oversight. We applaud the CFTC's **Staff Advisory 26-08** for suggesting Prediction Markets to partner with relevant authorities, sports leagues, and governing bodies to ensure **market integrity**.

Now, with prediction markets being an integral part tied to the broader FinCEN, TFI, and other law enforcement and intelligence agencies, such as the Egmont Group of 100+ FIUs domestically and internationally, the "***decree***" is at the disposal of the US Executive Branch in properly advancing the "***America First***" agenda.[65] Would this "***decree***" include the use of prediction markets by the Executive branch to initiate trading halt, cancel trades, redrawn relevant rules, or even "*influence the outcomes*" *if in case foreign adversaries are causing flash crashes or destabilizing US financial supremacy*? It will be extremely effective if it is rightfully be used for **financial stability** purpose to ***shun evil***, but not others.

Therefore, the declaration of **Stress RENTD** requires appropriate checks and balances to prevent ***functional creep***. A couple of consideration factors: (a) if more than X% of the book flips to **Proprietary Mode**, the **CFTC** can trigger a "*Market Integrity Intervention*" or a **mini-Stress RENTD**, forcing a compulsory license at the last FRAND rate to ensure the market remains a utility; and (b) during **Stress RENTD**, the market may shift from a **Continuous Book** to a **Randomized Batch**

[61] https://www.ias.edu/sites/default/files/library/UsefulnessHarpers.pdf
[62] https://www.secactions.com/two-significant-losses-for-the-cftc/
[63] https://www.fincen.gov/system/files/case_example/040.pdf
[64] https://www.scottsdalemint.com/articles/2024/the-hunt-brothers-how-two-billionaires-broke-the-silver-market/
[65] https://www.whitehouse.gov/presidential-actions/2025/01/america-first-policy-directive-to-the-secretary-of-state/

Auction (every 10-60 seconds). This eliminates the latency advantage and ensures the "*Stress Period*" actually helps the hedgers rather than the snipers.

Under normal circumstances, the CFTC would step in to stop "***Proprietary Poisoning***" with a **Stress RENTD** to preserve market integrity. Alternatively, if a foreign adversary tries to enter the market to manipulate a US-centric outcome (e.g., an election or a specific regulatory event), the **Makers** use their **Proprietary Toggle** to "*go dark*" as a signal, where CFTC observes the refusal and stands down (i.e. "***discretionary override***" to *NOT* intervene). It allows the market's organic "***Willing Seller***" refusal to act as a **National Security Filter** (turning the "***Proprietary Poisoning***" threat into a **Strategic Defense Mechanism**). This is a sophisticated use of **Realpolitik within market microstructure**, where the US government can deter a suspicious foreign adversary *through makers collective actions*. See below for a discussion.

1. Centralized Discretionary Claw backs

The **Operating Committee** of a Prediction Market (with their **90-day Vested Skin in the Game**) identifies if a participant is a "Toxic Adversary" and their suspicious activity during a **Stress RENTD**, but they have no power to seize funds. They must present a "**Case for Intervention**" to the CFTC.

- **The Power:** Only the **CFTC** can trigger a **Retroactive Royalty Claw back**. By making this a purely regulatory discretionary tool, it prevents the "*Animal Farm*" elites from using "*predatory behavior*" as a pretext to settle scores with competitors.
- **For example**, If the 90-day Vested Jury determines a trade was predatory, the "**Royalty**" is not just the FRAND fee—it is 100% of the trade's alpha. This turns the predator's "*gaming*" into a forced donation to the Reputation Pool, benefiting the very participants they tried to exploit. Any profit "*mistakenly*" captured by a sniper during a **Stress RENTD** can be subject to **Claw back**.
- **The Logic:** This ensures that "***Alpha Seizure***" is a high-level regulatory act of Realpolitik, not a tool for market participants to cannibalize each other. If a sniper is caught extracting value during a crisis, the CFTC can reallocate those gains to the **Reputation Pool** to stabilize the system.

2. Market Ostracism as the Primary Defense

Instead of "***Tactical Latency***" (which can be gamed or lead to phantom liquidity), the defense remains the **Sovereign Right of Refusal**:

- The market remains a **Continuous Limit Order Book** for all.
- However, if Makers (the ***Willing Sellers***) collectively suspect "***Adverse Intent***" or "*Sniping*," they simply **withhold their quotes** from those specific counterparties by toggling to ***Proprietary Mode*** (i.e., forfeit royalties than provide a signal or liquidity to an adversary).
- **The Result:** The market does not "*lag*" or "pivot"—it simply **thins out** for the bad actor. If the actor is a foreign adversary, the CFTC's "*stand down*" (choosing not to declare a Stress RENTD override) allows the Makers' collective refusal to succeed.

3. The "Realpolitik" Balance to create a Triple-Lock System

a) **Makers** provide the initial defense via the **Proprietary Toggle**.
b) **The Operating Committee** provides intelligence/monitoring.
c) **The CFTC** provides the "*Executive Hammer*" (Claw backs and Stress Period Overrides).

In the Whelan paper, Prediction Market is a "*passive*" venue where the rules are static. In our recommended model, it turns the market into an ***Active Defense*** environment**.** This Realpolitik within market microstructure can also be used to

address the ***Midpoint Sniping*** issue during a **Stress RENTD** period, that. For the sake of keeping the market's technical execution clean and non-discriminatory, while centralizing the **"Executive Power"** within the **CFTC.**

- **Predators** face the risk of **Regulatory Claw backs** if they exploit a crisis.
- **Adversaries** face **Market Ostracism** from Makers who value their "*90-day Vested*" reputation over a one-time trade with a bad actor.
- **Fairness** is preserved because the "**rules**" of execution do not change—only the **willingness** of participants to engage.

Lastly, we recommend the following clause to be added to any Prediction Markets' **Governance Charter**:
"The Operating Committee, in consultation with the CFTC, may designate specific 'Adverse Actors.' For such actors, the Compulsory Licensing and Stress RENTD provisions shall be suspended, preserving the fundamental right of a Willing Seller to withhold information and liquidity in the interest of National Market Integrity."

Key Response to Questions

- An event contract should not be treated as a security option or privilege unless its payout is explicitly and mathematically dependent on a synthesized capital-market appraisal rather than a raw operational milestone. Regulatory misapplication occurs when the option exclusion is stretched to encompass contracts tracking physical variables – such as corporate cargo volumes – which are broad economic commodity "causes" rather than security-based "effects". Unlike standardized binary options that operate as arm's-length market-making facilities driven by volatile investor sentiment, prediction market event contracts function as decentralized, parametric insurance conduits designed to manage real-world uncertainty.
- An instrument is an evidence-of-indebtedness excluded from the swap definition pursuant to CEA §1a(47)(B)(vii) only if its core economic substance reflects a genuine, traditional lender-borrower relationship rather than a mechanism to package and redistribute synthetic market risks. Nominal compliance markers, such as a debt label or an indenture qualified under the Trust Indenture Act of 1939, are structurally insufficient when investment banks operate as risk packagers issuing structured notes whose payouts are fundamentally tied to derivatives. Unless an innovative asset establishes a true debt obligation independent of market sentiment, its risk characteristics behave as an exposure to a cause, requiring that it be governed under a lean, unified CFTC swap architecture to close regulatory loopholes.
- Under current rules, an index shifting between broad-based and narrow-based classifications forces underlying derivatives to continuously flip between swap and SBS states. To eliminate this fluid boundary friction, the updated rules must replace fragile grace periods with a definitive safe harbor based on execution architecture and capital physics. If a custom index formula uses corporate identifiers but settles strictly against raw, non-valuational operational realities – and is managed under a 100% pre-funded CPO-Matchmaker model – it measures a structural cause and must remain an excluded commodity under exclusive CFTC purview, completely bypassing duplicative NBSI recharacterizations.
- An equity-referenced "perpetual" contract should not be artificially squeezed into legacy security-futures definitions. While mimicking a baccarat casino by netting opposing wagers, perpetuals introduce leverage and real-time margining that turn them into dynamic, stress-transmitting instruments. Leaving this architecture unaddressed turns exchanges into risk packagers whose synthetic side-bets amplify volatility, fragment liquidity, and threaten financial stability.

Healthy capital markets development requires both TradFi and DeFi to be united while maintaining positive tensions in the technology arms race. Trust will be earned over time if we can reduce chaos and shape a safer and fair environment for all! Please see Annex 1 and Annex 2 for our response to specific questions in the two RFCs. Feel free to contact us with any questions and please keep us posted where our expertise might be helpful.

Sincerely,

Kelvin To

Founder and President

Data Boiler Technologies, LLC

This letter is also available at: https://www.DataBoiler.com/index_htm_files/DataBoiler%20CFTC%20SEC%2020260824.pdf

CC: **Commodity Futures Trading Commission (CFTC)**

The Honorable Michael S. Selig, Chairman
Mr. Duncan Henes, Director, Market Participants Division / Acting Director, Division of Market Oversight
Mr. Richard Haynes, Acting Director of the Division of Clearing and Risk
Mr. Frank Fisanich, Deputy Director of Market Oversight, CFTC
Mr. Owen Kopon, Associate Director, Division of Market Oversight
Mr. Paul Chaffin, Special Counsel, Division of Market Oversight
Mr. Jorge Herrada, Director of the Office of Technology Innovation
Mr. Stephen Andrews, Deputy General Counsel for Regulation
Mr. Herminio Castro, Associate General Counsel
Mr. Mark Fajfar, Senior Assistant General Counsel

Securities and Exchange Commission (SEC)

The Honorable Paul S. Atkins, Chairman of the SEC
The Honorable Hester M. Peirce, Commissioner of the SEC
The Honorable Mark T. Uyeda, Commissioner of the SEC
Mr. Jamie Selway, Director of the Division of Trading and Markets
Ms. Carol McGee, Assistant Director, Division of Trading and Markets
Mr. Arun Manoharan, Assistant Director, Division of Trading and Markets
Mr. Richard Holley III, Assistant Director, Division of Trading and Markets
Ms. Larua Compton, Senior Special Council, Division of Trading and Markets
Mr. Jesse Brady, Division's Office of Analytics and Research
Mr. Ethan Coombs, Division's Office of Analytics and Research

Federal Reserve Board of Governors (FED)

Mr. Andreas Lehnert, Director of the Division of Financial Stability

Office of Comptroller of the Currency (OCC)

Mr. Jay Gallagher, Chief National Bank Examiner

Federal Deposit Insurance Corporation (FDIC)

Ms. Dana T. Wade, Deputy to the Chairman and Chief of Staff

ANNEX 1 – Data Boiler's response to specific questions about Further Definition of "Swap" and "Security-Based Swap" and on Alternative Compliance

Part II — Definitional Clarity (Questions 1–11)

1. What types of event contracts or other innovative products or product structures that may touch on the regulatory interests of both Commissions have raised interpretive questions for market participants, and how should those questions be resolved? In the context of these innovations, is additional clarification necessary to provide principled, objective criteria for distinguishing between swaps, mixed swaps, SBS, or other securities or instruments that are excluded from the definition of "swap"? What characteristics do event contracts share or not share with other products that may be classified as swaps, mixed swaps, SBS, or other securities or products excluded from the "swap" definition? Taking into account the rules and interpretations the Commissions adopted in the Product Definitions Adopting Release, should the Commissions issue new or revised rules or interpretations to address these innovations?

We urge the Commissions to modernize the regulatory framework to eliminate the structural ambiguity that arises when a prediction market contract references individual securities or narrow-based security indexes. While broad-based indexes are clearly defined as swaps under CFTC jurisdiction, a fundamental conflict emerges when an event contract references an individual equity, which would traditionally classify its standard derivative as an SEC-regulated SBS. To protect current and future industry innovation, the regulatory framework must enumerate that an event contract's status as a swap is completely independent of the underlying asset class, even if that asset family includes products whose own derivatives are not swaps under CEA §1a(47)(B).

To formalize this product-class independence without generating cross-border friction, the Commissions must replace vague, narrative-driven boundaries with our Exposure to Cause versus Effect (E2CvE) bright-line test. This structural solution directly addresses the ongoing **Title VII** jurisdictional friction over clearing, margin, and prudential oversight. Trying to draw a regulatory boundary based on vague standards like "*affects an issuer*" or relying on a "*but-for*" causation narrative causes the SEC to overextend its authority, imposing an unnecessary compliance burden across the broader financial network. Under the E2CvE model, if an event contract settles strictly against raw operational realities, physical outputs, or macro-contingencies independent of market sentiment, it measures a structural "cause" and must be classified as a CFTC commodity swap. Conversely, if the payoff is mathematically dependent on synthesized capital-market appraisals or secondary market prices, it measures an "effect" and remains an SEC-regulated SBS.

Building upon this functional separation, the Commissions must recognize that prediction market event contracts frequently function akin to catastrophe insurance, as both structures deal with the probability of real-world outcomes to manage uncertainty rather than engage in pure price speculation. While the Commissions originally intended the "mixed swap" category to remain narrow, financial engineering has weaponized custom index formulas to blur these statutory lines. This problem must be resolved by looking entirely at the execution architecture. If a platform generates a volatile price-discovery curve driven by high-frequency bots, it creates a "*Valuation Mirage*" that mimics an equity derivative, forcing the product into joint oversight. However, when these contracts are packaged inside an alternative, 100% pre-funded structure managed by a CPO, the pool acts as a passive, parametric insurance conduit with zero mutualized default risk. In these narrow instances, the SEC should grant substituted compliance – allowing the platform to operate under lean CFTC structural rules while the SEC retains simple, non-duplicated anti-fraud oversight, safely resolving cross-agency friction without stifling fintech innovation.

2. As discussed above, several exclusions from the definition of "swap" are set forth in CEA section 1a(47)(B). Is additional regulatory clarity necessary with respect to application of these exclusions? For example, are there areas where principled, objective criteria could further clarify the definitional lines?

Yes, formal rule updates are necessary to replace the currently vague exclusions under CEA §1a(47)(B) with principled, objective criteria that draw a definitive line between SEC and CFTC jurisdictions. The current regime's reliance on narrative-driven, "*but-for*" causation standards allows the SEC to routinely overextend its authority. This occurs by treating raw operational facts disclosed in corporate documents as security-based variables. To resolve this friction, we recommend amending §1a(47)(B) to establish a mechanics-driven, **two-part bright-line test** based on our **Exposure to Cause versus Effect** (E2CvE) model. Under this framework, the Commissions should codify the "*Direct Target Rule*," which deems a contract an SEC-regulated SBS if and only if its payoff is explicitly and mathematically dependent on a tradable security price, debt instrument, narrow-based security index, or formal credit default. Concurrently, they must codify an "*Operational Separation Safe Harbor*" classifying any contract that settles against a raw operational event, physical output, or macro-contingency independent of market sentiment as a CFTC commodity swap. This rule applies provided that the contract can be evaluated using independent third-party data and enforces a code-governed, 100% pre-funded CPO-Matchmaker architecture.

3. Similarly, is there a need for greater clarity regarding the definitional lines between swaps, SBS, and mixed swaps? Is there a need for greater clarity regarding the scope and application of the SBS NBSI Prong, the SBS Single Security Prong, and/or the SBS Event Contract Prong?

Yes, formal rule updates are urgently needed to resolve the profound structural ambiguity surrounding the SEC's SBS prongs, which currently create severe regulatory duplication and market-integrity blind spots. Under the current regime, the SEC's overextension of its "*Event Contract Prong*" mistakenly treats raw operational metrics – such as vehicle production counts – as security-based variables simply because they are disclosed in a corporate 10-K or downstream narratives suggest they "*affect an issuer*." This document-reliant approach is completely flawed; an operational variable represents a primary "cause" that ripples across global supply chains, lithium demands, and broader economic commodity sectors, meaning it cannot be claimed as an exclusive, security-based "effect."

To eliminate duplicate policing, the Commissions must replace these vague boundaries with our Exposure to Cause versus Effect (E2CvE) model and implement three distinct structural filters: the Operational Sorter (Settlement Mechanism Test), the Legal Filter (Insulated Valuation Test), and the Structural Gate (Operational Intent Test). By looking beyond the mathematical-formula of a custom index and focusing entirely on its execution architecture and data sources, these filters ensure that unless a contract's payoff is explicitly and mathematically dependent on synthesized capital-market appraisals like stock price tickers, the instrument must be classified as a CFTC commodity swap, completely bypassing SEC overreach.

4. Is there a need for greater clarity regarding when a swap, option (including any put, call, straddle, option, or privilege), or future is based on "any interest" in a security or group or index of securities, particularly when the swap, option, or future is not based on the value of that security or group or index of securities?

Yes, formal rule updates are critical to provide greater clarity regarding the phrase "*any interest*" in a security to prevent the SEC from incorrectly claiming jurisdiction over innovative contracts that do not settle on an asset's financial value. This ambiguity is currently exploited when a prediction market contract references an underlying corporate or operational occurrence – such as an airline's cargo shipping volume – and the SEC attempts to treat it as an SEC-regulated SBS simply because the outcome correlates with a company's performance. This overreach relies on a flawed '*but-for*" causation narrative that misinterprets a primary, structural "cause" as a security-based "effect." To preserve market integrity and

protect fintech innovation, the Commissions must update their rules to clarify that an instrument's classification as a swap depends strictly on its settlement data sources and execution architecture, not the asset category it references. By applying our Exposure to Cause versus Effect (E2CvE) framework, the rules must establish that unless a contract's payoff is explicitly and mathematically dependent on a synthesized capital-market appraisal (like a stock price ticker or a debt yield), the contract remains an excluded commodity under exclusive CFTC jurisdiction, completely independent of the underlying product family.

5. Regarding the SBS NBSI Prong, is there a need for additional clarity regarding when a swap is based on "an index that is [an NBSI] including any interest therein or on the value thereof"? Should the Commissions further address the circumstances when a swap does or does not satisfy the SBS NBSI Prong? For example, what additional clarity, consistent with CEA section 1a(35) and Exchange Act section 3(a)(55), might the Commissions provide with respect to the characterization of contracts referring to potential changes to the composition of an NBSI, as opposed to changes in the price or value of an NBSI? The Commissions have adopted rules addressing tolerance periods and grace periods for products referencing securities indexes traded on designated contract markets, swap execution facilities ("SEFs"), foreign boards of trade, security-based SEFs, or national securities exchanges, where the securities index temporarily moves from broad-based to narrow-based or from narrow-based to broad-based. Should the Commissions revise or clarify those rules or provide additional clarity, transition rules, or safe harbors for products that are based on a securities index that transitions between narrow-based and broad-based, or vice versa?

Yes. Current regulations dictate that derivatives based on a broad-based security index are defined as swaps, whereas those based on a narrow-based index are excluded from the swap definition and treated as SBS. Consequently, an index that transitions between broad and narrow classifications effectively forces any underlying derivative to migrate from a swap to an SBS, or from an SBS to a swap, respectively. The Commissions must address this fluid jurisdictional boundary.

Under the baseline 2012 Product Definitions Adopting Release, drawing lines based on volatile index compositions creates an "Interoperability Illusion" and a localized data silo that leaves macro-prudential supervisors completely blind to cross-border risk concentrations. Attempting to resolve index transitions or changes in composition through rigid mathematical rules fails because it ignores the structural vehicle and data ingestion layers handling the contract. Therefore, formal rule updates are inevitable. It must to replace the arbitrary mathematical formulas and temporary tolerance or grace periods governing the narrow-based security index (NBSI) prong with an execution-architecture framework.

Under our Exposure to Cause versus Effect (E2CvE) framework, the jurisdictional boundary must not look at whether a custom index formula looks like an NBSI, but rather how it settles: if an index uses corporate identifiers but settles strictly against raw, non-valuational operational realities – such as physical cargo volumes – it measures a structural cause and must remain an excluded commodity under exclusive CFTC purview, bypassing SEC overreach entirely. Conversely, if the index changes value based on secondary market prices, yields, or corporate credit events, it measures a valuational effect that falls under SEC jurisdiction as an SBS.

Instead of managing temporary index drifts with fragile grace periods, the updated rules must establish a definitive **safe harbor** based on a platform's capital physics. If a platform operates as a 100% pre-funded, code-governed CPO-Matchmaker model utilizing an independent, live-audited proof-of-reserve system, it functions as a passive parametric risk conduit that removes credit default loops and eliminates the need for duplicative, overlapping institutional index definitions.

6. Regarding the SBS Single Security Prong, is additional clarity necessary regarding when a swap is based on "a single security or loan, including any interest therein or on the value thereof"? Should the Commissions further address the circumstances when a swap does or does not satisfy the SBS Single Security Prong?

Yes, the Commissions must update the formal rules to replace the ambiguous "*single security or loan*" prong with our mechanics-driven Exposure to Cause versus Effect (E2CvE) model to maintain a balanced and accurate regulatory perimeter. Under the current Title VII interpretation, the SEC mistakenly treats an innovative contract as an SEC-regulated SBS simply because it references a single corporate identity or an input variable that down-stream narratives suggest could "*affect a listed security*" or loan value. This document-reliant approach is structurally flawed; an operational variable – such as a single firm's quarterly car delivery count or physical factory footprint – is a broad economic commodity and a primary "cause" that ripples across the entire commercial ecosystem, meaning it cannot be claimed as an exclusive, security-based "effect".

To eliminate unnecessary boundary expansion and prevent duplicate policing, the rules must establish that an event contract's status as a swap depends strictly on its execution architecture and settlement data sources, not the category of product it references. Unless a contract's payoff is explicitly and mathematically dependent on a synthesized capital-market appraisal (such as a single stock price ticker, debt yield, or ledger net profit), the parameter must stop at the ledger's edge, leaving the contract as an excluded commodity under exclusive CFTC swap jurisdiction.

7. Regarding the SBS Event Contract Prong, is additional clarity necessary regarding when an event "directly affects" the financial statements, financial condition, or financial obligations of an issuer? Should the Commissions further address the circumstances when a swap does or does not satisfy the SBS Event Contract Prong? How should any further clarifications relate to the Commissions' rules and guidance on credit default swaps in the Product Definitions Adopting Release, and should such rules and guidance be revised or clarified?

Yes, formal rule updates are vital to replace the vague, document-reliant narrative of the "*directly affects*" standard within the SBS Event Contract Prong with objective, mechanics-driven boundaries to maintain an accurate and well-defined regulatory perimeter. This boundary cannot depend on whether an operational metric happens to be disclosed in a corporate 10-K filing; rather, under our Exposure to Cause versus Effect (E2CvE) framework, the rules must recognize that a raw operational variable represents a primary "cause" that ripples across global economic networks, making it an excluded commodity under exclusive CFTC swap jurisdiction rather than an SEC-regulated "effect." To resolve these boundary disputes, the Commissions must revise the 2012 Product Definitions Adopting Release and replace narrative-driven tests with three objective structural filters: the Operational Sorter (Settlement Mechanism Test), the Legal Filter (Insulated Valuation Test), and the Structural Gate (Operational Intent Test).

This precise methodology directly corrects the original 2012 guidance on CDS by looking beyond the mathematical formula of a custom index and focusing entirely on its execution architecture. Unless a contract is listed on an open exchange featuring high-velocity bots and marginal leverage – which creates a volatile "Valuation Mirage" that mimics an equity derivative and justifies joint mixed-swap oversight – the contract should be granted an alternative compliance passport under lean CFTC structural rules, safely separating *price speculation* from *passive parametric risk conduits* (insurance pool).

8. Some event contracts settle by reference to a security or group or index of securities (whether narrow-based or broad-based). While certain of these event contracts may generally fall within the prongs of the "swap" and "security-based swap" definitions described above, there is a statutory exclusion from the definitions of "swap" and "security-based swap" for "any put, call, straddle, option, or privilege on any security, certificate of deposit, or group or index of securities, including any interest therein or based on the value thereof, that is subject to [the Securities Act and the Exchange Act]".

Are there circumstances in which an event contract that references one or more securities should or should not be considered a "put, call, straddle, option, or privilege on" a security or group or index of securities for purposes of the exclusion from the definitions of "swap" and "security-based swap"? Is there a need for greater clarity regarding when an event contract is a "put, call, straddle, option, or privilege" on an "interest" in, or "based on the value" of, "any security…or group or index of securities" (whether narrow-based or broad-based), that is subject to the Securities Act and the Exchange Act and therefore not a swap or SBS? What are the characteristics of event contracts based on a security or index that are swaps or SBS, that distinguish them from options on securities, including in particular binary options that already trade as standardized options on securities on national securities exchanges?

We urge the Commissions to issue formal rules updates that clarify the statutory exclusion for security options to prevent arbitrary boundary expansion and preserve the separate legal identity of prediction market event contracts. Under current rules, an option or privilege on a security is excluded from the swap definitions if it is subject to the Securities Act and the Exchange Act. However, when an event contract references a single equity or narrow-based security index – such as tracking an issuer's physical cargo volumes – regulatory misapplication occurs. This friction arises when the exclusion is stretched to characterize the transaction as a traditional security option simply because the reference asset belongs to a corporate issuer. It *conflates an instrument's structural* "cause" *with its valuational* "effect."

Historical precedent supports this separation; during the 1992–2000 exchange-traded era, the CBOT Insurance Catastrophe Futures fell entirely under the CFTC's exclusive jurisdiction. Because those payouts were tied to an aggregated physical loss index – and not to the stock price, debt, or financial execution of a specific issuer – the SEC held zero jurisdiction, and the contracts could not legally be classified as securities. To protect modern innovation, the updated rules must reinforce this precedent, establishing that a contract should not be considered a put, call, or privilege on a security unless its payout is explicitly and mathematically dependent on a synthesized capital-market appraisal, rather than a raw operational milestone.

The updated rules must establish that a contract should not be considered a put, call, or privilege on a security unless its payout is explicitly and mathematically dependent on a synthesized capital-market appraisal, rather than a raw operational milestone. Furthermore, the updated rules must clearly distinguish prediction market event contracts from standard binary options traded on national securities exchanges. Standardized binary options are arm's-length market-making facilities that generate a volatile, sentiment-driven "Valuation Mirage."

Conversely, prediction markets act as decentralized, parametric insurance pools designed to hedge against real-world operational realities rather than engage in pure price speculation. To codify these distinct characteristics, the Commissions must replace the vague, narrative-driven 2012 guidelines with our Exposure to Cause versus Effect (E2CvE) model and its three structural filters: the Operational Sorter, the Legal Filter, and the Structural Gate. If an event contract is managed under a 100% pre-funded, code-governed CPO architecture that bans internal trading bots, it functions strictly as a passive risk conduit. In these instances, the contract must be deemed a swap under exclusive CFTC jurisdiction, completely exempting it from duplicative SEC option recharacterization.

9. Any note, bond, or evidence of indebtedness that is a security as defined in section 2(a)(1) of the Securities Act is excluded from the "swap" definition. In light of innovative products and product structures, but mindful of the existing structured notes market, is there a need to further clarify whether a particular instrument is a note, bond, or evidence of indebtedness that is a security, and thus excluded from the definition of "swap" pursuant to CEA section 1a(47)(B)(vii), as compared to a swap or SBS? For example, what consideration should be given to whether the financial instrument is issued pursuant to an indenture qualified under the Trust Indenture Act of 1939? What consideration should be given to whether

the terms of the instrument reflect a lender-borrower relationship? Are there different or additional criteria relevant to distinguishing notes, bonds, and other evidence of indebtedness that are securities from swaps or SBS?

Yes, formal rule updates are necessary to replace the generic "evidence of indebtedness" criteria under CEA §1a(47)(B)(vii) with a standard that evaluates the true economic substance of a transaction to prevent custom hybrid instruments from blurring the lines of the swap definition. Under the current regime, investment banks acting as risk packagers routinely issue structured notes to their clients, only to immediately buy event contracts on CFTC-regulated prediction markets to hedge their own exposure. This creates a severe jurisdictional **gray area** because a structured note's payout is fundamentally tied to a derivative, allowing its value to shift continuously based on underlying yields rather than a standard lender-borrower relationship.

The updated rules must establish that the presence of an indenture qualified under the Trust Indenture Act of 1939 or a nominal debt label is insufficient if the instrument's core function is to package and redistribute synthetic market risks. To eliminate this interpretive friction, the Commissions must look past literal compliance markers and evaluate the instrument's true economic profile using the three structural filters of our Exposure to Cause versus Effect (E2CvE) model. Unless an innovative asset establishes a genuine, traditional lender-borrower relationship or its payoff is explicitly and mathematically dependent on a synthesized capital-market appraisal, it must not be excluded from the swap framework. When these hybrid instruments track real-world physical outputs instead of market prices, they measure a structural cause. The updated rules must clearly state that these contracts belong under a single, lean CFTC swap framework. This ensures that complex risk-packaging strategies cannot be used as a loophole to avoid proper derivatives oversight.

10. Security forwards, if intended to be physically settled at the time the contract is entered into, are excluded from the definitions of "swap" and "security-based swap." In the Product Definitions Adopting Release, the Commissions declined to provide a bright-line test for determining whether a security forward is intended to be physically settled. In light of innovative products and product structures, should the Commissions provide additional clarity as to the meaning of the phrase "for deferred shipment or delivery, so long as the transaction is intended to be physically settled" in the exclusion from the definition of "swap" set forth in CEA section 1a(47)(B)(ii)? What approach should be taken?

Yes, formal rule updates are necessary to replace the subjective, facts-and-circumstances analysis of the forward contract exclusion under CEA §1a(47)(B)(ii) with a strict, mechanics-driven baseline. The baseline 2012 Product Definitions framework failed by refusing to provide a bright-line test for physical intent. This lack of boundaries allows the SEC to misapply narrative-driven standards to cash-settled contracts, creating severe technological mismatches and data reporting friction. To prevent this overreach, the Commissions must update their rules to clarify that physical intent cannot be determined by downstream economic narratives or document-based disclosures.

Under our Exposure to Cause versus Effect (E2CvE) model, the updated rules must establish that if a contract's settlement is explicitly and mathematically dependent on a synthesized capital-market appraisal, it is an SEC-regulated derivative. Conversely, if an innovative platform utilizes a 100% pre-funded, code-governed CPO architecture to match and clear raw operational milestones independent of market sentiment, it functions as a passive parametric risk conduit. The rules must explicitly safe-harbor these structures under exclusive CFTC swap jurisdiction, ensuring that forward delivery metrics cannot be recharacterized to expand the security perimeter or stifle fintech innovation.

11. Any contract of sale of a commodity for future delivery (or option on such a contract), as well as any security futures product, is excluded from the "swap" definition. Is there a need for greater clarity from the Commissions regarding the treatment of futures, including security futures, in the context of innovative markets? For example, is there a need for greater clarity regarding whether a cash-settled "perpetual" contract referencing an equity security could be treated as a

security future? What effects could the introduction of such products have on liquidity formation, price discovery, and hedging activity, particularly with regards to the derivatives and underlying cash equity markets?

We strongly caution the Commissions against leaving equity-referenced "*perpetual*" contracts in a regulatory gray area or attempting to artificially squeeze them into legacy security-futures definitions. Forcing compliant US institutional liquidity providers to sit on the sideline harms price discovery, leaving the market entirely to offshore, unregulated actors. This regulatory vacuum fragments liquidity and introduces hidden vulnerabilities into the underlying cash securities markets.

To evaluate these instruments properly, the Commissions must look past legacy labels and analyze their true microstructure. Structurally, CFTC-regulated perpetual futures[66] share a structural resemblance to the aggregation of wagers in a baccarat casino. Both systems pool opposing directional views into a single, continuously balanced risk reservoir. In baccarat, bets on the "*Player*" and "*Banker*" are aggregated and netted, with the house remaining strictly neutral. Perpetual contracts operate on this exact mathematical principle: longs and shorts are aggregated directly into open interest, while periodic funding payments function like the commission on a Banker bet – acting as a continuous cash-flow transfer between participants to keep the system in equilibrium. Neither the operator nor the clearinghouse takes directional exposure; instead, both rely on a crowd-sourced pool of opposing wagers to neutralize risk.

However, perpetual contracts introduce leverage, continuous mark-to-market mechanics, and real-time margining. These features transform a simple zero-sum betting pool into a dynamic, stress-transmitting financial instrument. Under this architecture, DCMs cease to act as neutral routers. Instead, they become risk packagers, manufacturing synthetic "*side-bet*" loops whose design can amplify crowd-driven volatility. A sudden surge of highly leveraged longs or shorts forces DCOs – which are supposed to remain neutral intermediaries – to issue rapid intraday margin calls and accelerate collateral flows.

Crucially, this stress does not sit on the DCO itself. Because perpetuals never expire, directional imbalances can persist and compound indefinitely. This design requires continuous variation-margin flows that strain clearing members, liquidity providers, and commercial settlement banks. The perpetual architecture effectively pushes crowd-driven volatility and systemic liquidity pressure directly into the central clearing ecosystem. When underlying cash markets move sharply, the DCO must process massive, real-time P&L transfers, relying heavily on the capital adequacy of its clearing members, guaranty funds, and settlement banking networks to remain solvent. Leaving these products unregulated allows a synthetic side-bet loop to transmit crowd-driven stress into the very financial infrastructure meant to absorb it. This creates a dangerous feedback loop where participant behavior amplifies systemic risk, destabilizes the value chain, and exposes the broader plumbing of the financial system to sudden technical collapses.

Part III — Alternative Compliance (Questions 12–15)
12. Where trading in economically related or functionally similar product classes implicates both SEC and CFTC regulatory interests, are there circumstances in which compliance with one Commission's regulatory framework could appropriately satisfy substantially similar requirements of the other Commission (alternative compliance)? In this case, how should "substantially similar" be viewed? Should it contemplate scope, objectives and/or outcomes of requirements? Supervisory compliance programs? Enforcement authority? Other considerations/standards?

We recommend that "*substantially similar*" compliance metrics be evaluated based on shared regulatory outcomes and structural safety, rather than requiring identical administrative processes or overlapping registration tracks. Forcing

[66] https://www.regulations.gov/document/CFTC-2026-1388-0001

innovative architectures into legacy reporting frameworks can introduce significant data-processing costs and operational friction without necessarily enhancing real-time risk mitigation across interconnected networks.

To maintain market integrity while respecting Title VII boundaries, the Commissions should leverage the FSOC and the Interagency Risk Committee to establish an alternative compliance pathway through a 100% pre-funded, fiduciary-backed CPO framework. By utilizing a peer-to-peer risk-matching ledger where all wagers are fully collateralized upfront, this model naturally mitigates systemic credit risk and default loops. Interagency surveillance and transaction telemetry can then be efficiently managed via a split-ingestion architecture: a public, cloud-native subscription feed handles high-volume, anonymous market data, while an automated identity gateway securely transmits participant credentials only when automated surveillance nodes detect specific trading anomalies. This outcome-based approach allows both agencies to maintain robust oversight against wash trading and cross-market insider manipulation without duplicating compliance pipelines or creating centralized cybersecurity vulnerabilities.

Detect cross-market insider trading requires concerted surveillance coordination between exchanges and client-facing brokers. In addition to utilizing secure containerized communication apps under strict archiving rules to isolate and record business data without intruding upon privacy, policymakers can evaluate prediction markets through the structural lens of corporate whistleblower programs, recognizing that both frameworks leverage frontline crowd intelligence to reduce data asymmetry and expose hidden corporate malfeasance.

13. Title VII provides that the Commissions may adopt rules to further define terms included in Title VII, but it also limits the exemptive authority of each Commission over certain provisions related to swaps and SBS. In light of these provisions, under what circumstances should the Commissions consider/pursue joint or coordinated notice registration, tailored rules, rules of procedure, tailored trade reporting rules, deemed filing, or other joint or coordinated approaches to facilitate alternative compliance?

The Commissions should pursue joint rulemaking, coordinated notice registration, and tailored trade reporting rules specifically when an innovative platform operates as a 100% pre-funded, code-governed CPO Matchmaker model to hedge physical causes. While Title VII restricts unilateral exemptions over certain swap and SBS provisions, the joint commissions can leverage their shared statutory authority to codify a synchronized alternative compliance pathway that respects each agency's core mandate. This coordinated approach is necessary for hybrid or custom-weighted indexes that cross traditional boundaries, allowing the platform to run under lean, outcome-based CFTC operational parameters while seamlessly adhering to basic SEC insider trading anti-fraud protections.

Rather than forcing platforms to build fragmented, duplicative pipelines or submit to separate, unaligned registration tracks, the updated rules should establish a "***deemed filing***" mechanism and a split-ingestion data architecture. By emitting anonymous transaction payloads through a shared public subscription feed and utilizing an automated identity gateway to securely transmit sensitive participant data only during flagged anomalies, this joint framework satisfies the oversight needs of both agencies, eliminates duplicative compliance burdens, and preserves vital transaction telemetry for macro-prudential supervisors.

14. What considerations should guide surveillance, examination, and enforcement under an alternative compliance approach? How could enhanced sharing of information and data26 help fulfil the Commissions' regulatory mandates under an alternative compliance approach? How could the Commissions more effectively coordinate to examine and enforce their regulatory requirements?

Alternative compliance oversight must be guided by operational and technological safeguards that align with the five CFTC enforcement priorities. To **combat willful AML/KYC violations** and, client-facing brokers represent the first-line of defense

for clients' profiles checking and filing of suspicious activity reports. Meanwhile, prediction Markets must enforce algorithmic risk simulations to programmatically prevent AMM front-running, and be required to submit mathematical "*Narrow-Outcome Influence Scores*". To counter ***retail fraud***, the Commissions should utilize the empirical Whelan approach to conduct an annual audit of Prediction Markets. This will eliminate the *favorite-longshot biases* used to systematically exploit retail traders.

Also, the Commissions should encourage exchange to utilize *Event-Adjacent Incident Referrals*. This framework enables platforms to receive alerts of suspicious activities happening around the physical event from official leagues and cybersecurity partners, allowing them to effectively track, investigate, and log real-world match-fixing, DDoS infrastructure sabotage, and oracle tampering.

To address ***insider trading***, and ***market manipulation***, the Commissions should mandate Concerted Surveillance via Tiered Semantic Insider Tracking. Update §40.11 and Part 38 to require prediction markets to orchestrate a coordinated surveillance architecture with client-facing brokers, utilizing the statutory information-sharing vectors under CFTC Rule 38.254. Under this joint framework, the execution venue provides a Tier 1 Agentic AI layer to continuously monitor anonymous transaction feeds for operational anomalies. Concurrently, the client-facing brokers—who are already required to conduct KYC/AML and collect employee data under Part 1 rules—must maintain a Tier 2 Audit Trail Hub semantic database. This Tier 2 database must be architected to summon relevant participant identities when a Tier 1 automated surveillance node flags a specific symptom of suspicious market activity. See our Blueprint design.

It takes **concerted efforts** between exchanges and the client-facing brokers, and involving the use of advanced voice surveillance (e.g. NICE Actimize covers emails, chats, voice calls, texts, social media, and unified communications). Pursuant to SEC Rule 17a-4(b)(4), broker-dealers must preserve all communications relating to their *"business as such"* for a minimum of three years. To comply with SEC Rule 17a-4 and FINRA Rule 3110 while permitting *"Bring Your Own Device*" (BYOD) personal cell phone use, broker-dealers utilize containerized work apps, eSIM/Dual SIM virtual numbers, or network-level carrier mirroring to isolate, record, and extract business communications **without intruding upon privacy**. Crucially, the scope of this assessment must evaluate both what constitutes MNPI and which individuals possesses it.

Nevertheless, whistleblower programs and prediction markets both operate on the principle that crowds or insiders possess vital frontline data that lowers information asymmetry and exposes hidden corporate malfeasance. However, while whistleblowers receive bounties through lengthy bureaucratic vetting, prediction markets bypass this friction to price corporate fraud instantly via public contract settlements, introducing an "*Insider Information Paradox*" regarding trading on MNPI. To balance these mechanisms, policymakers should establish an Enforcement Safe Harbor that permits expertise-driven analysis and the aggregation of fragmented public data, while strictly prohibiting incentivized sabotage, government front-running, and the misappropriation of non-public data. Under this balanced framework, corporate insiders who discover internal fraud should be legally barred from profiting via prediction market wagers; instead, they must be required to route tips directly through formal SEC or CFTC whistleblower channels to ensure truth-seeking is channeled into structured legal remedies rather than chaotic, anonymous market sell-offs.

To deter ***disruptive trading*** and ***foreign adversaries***, the Commissions should mandate DCOs to act as the back-end validators to track macro-level asset flights to offshore platforms. Utilize the TIER 3 TPU to handle complex calculations (include reverse engineering of portfolio compression to gauge where risks may shift) and reinforcement learning. It supports a holistically assessment of changes in market dynamics, understand where frictions and liquidity concentration may shift at rapid pace, or consider stress and weak links where the next flash crash or systemic risks may emerge in order to develop mitigation protocols with more effective and timely ***volatility interruption mechanisms***.

✉ info@databoiler.com https://www.databoiler.com

To curb illicit activities in both traditional securities and futures markets as well as prediction markets, legacy surveillance systems must be upgraded or replaced with more powerful AI **machine learning** and **simulation** techniques. It would need to assess profile (check for consistency if anyone may act out of character), gauge RENTD, and reveal **trade intents** through onset signals detection that consists of, but not limited to, multi-dimensional analysis, simulation back-testing in reconstructing not only the trade sequence but also the dynamics, back-stop assurance for synthetic created trades, etc. For example, beyond life of hedge is a "***trigger***" of concern. Any single "***trigger***" may not be a violation; however, the legitimacy of trade activities may be challenged if they occur in an order resembling *a set of triggers* (***pattern***) in the lessons database. Data Boiler pioneered in accurate detection of onset signals / trade irregularities at accelerated speed and more tolerable to unsynchronized clocks/ timestamp issues with related patents that claim priority since 2014. [67]

To enrich surveillance functionalities against **bot-driven** fake accounts, misinformation, and catch alleged misuse of MNPI, it is essential to build partnerships with online platforms and communication infrastructures to track suspects' digital trails of where, when, and with whom. Public-Private partnership (e.g. CISA's IEP) should be encouraged.[68] Connecting the **intelligence community**, including FinCEN, TFI, and other law enforcement and intelligence agencies, such as the Egmont Group of 100+ FIUs[69] domestically and internationally. Deterring fraudsters and adversaries requires diverse, collective efforts rather than bureaucracy.

15. Under an alternative compliance regime, how could the Commissions best deter market manipulation and trading on material non-public information? What steps should the agencies take to ensure robust surveillance and oversight of cross-market activities?

Please see our response to Q14.

[67] https://www.databoiler.com/products.htm
[68] https://www.cisa.gov/news-events/news/cisa-launches-new-platform-strengthen-industry-engagement-and-collaboration
[69] https://egmontgroup.org/faqs/

ANNEX 2 – Data Boiler's response to specific questions about Swap and Security-Based Swap Data Reporting

Harmonization Across Frameworks

1. *Which reporting requirements or data elements would benefit from harmonization to minimize or eliminate unnecessary inconsistencies in compliance obligations? Please identify and explain.*

   The Commissions must prioritize the harmonization of the CFTC's large trader reporting system (Form 102) with the SEC's tracking framework (Schedule 10B / Form 13H) to eliminate severe data-in-motion compliance taxes and operational duplication. Currently, the CFTC designs its reporting around systemic liquidity and macro risk, whereas the SEC focuses on corporate fraud and valuation distortion. This fundamental misalignment forces FinTech firms to burn critical capital wrapping disparate data sets just to hit bare-minimum compliance for identical economic events. To secure a fit-for-purpose framework for novel derivatives, the agencies must synchronize these rules to ensure that a platform clearing risk safely under CFTC rules does not face immediate SEC enforcement for failing to publish overlapping, public Schedule 10B insider filings.

   To minimize these regulatory loopholes and data-processing strains, the updated framework should abandon case-by-case exemptions and harmonize reporting pipelines around an execution-architecture model aligned with the global Unique Product Identifier (UPI) standard. This approach requires rejecting provisions that allow localized, platform-native contract tickers to serve as unique identifiers, which creates isolated data silos that leave macro-prudential supervisors blind to cross-border risk concentrations. Furthermore, the Commissions must harmonize data pipelines by utilizing our Exposure to Cause versus Effect (E2CvE) model. If an event contract settles against a raw operational variable independent of market sentiment, it should be considered for an alternative compliance pathway that establishes a unified, single-window telemetry stream under exclusive CFTC jurisdiction, eliminating the duplicative burden of populating hundreds of blank institutional swap fields.

2. *Should the SEC amend Regulation SBSR to require the platform to report platform-executed, non-cleared trades to the SBSDR, consistent with the CFTC's requirements,20 which are different than the SEC's requirements?*

   The SEC should amend Regulation SBSR to require platforms to report platform-executed, non-cleared trades to a security-based swap data repository (SBSDR), if the framework is fully harmonized with the CFTC's data specifications to prevent unaligned systems from forcing FinTechs to burn capital wrapping disparate data sets. Under our proposed alternative compliance pathway, if an event contract settles against a raw operational variable independent of market sentiment, it can be exempt from duplicative SEC reporting entirely and preserve a unified, single-window telemetry stream under exclusive CFTC jurisdiction.

   However, where a platform hosts contracts that implicate both agencies – such as custom indexes that trigger an SEC "Event Contract Prong" recharacterization – the reporting framework must look vastly different and significantly leaner than complex, multi-tiered institutional swap reporting rules. By eliminating data burdens through our fully collateralized CPO model, the platform permanently fixes metrics like variation margin or collateral haircuts at zero, meaning the SEC should synchronize Regulation SBSR to accept our streamlined data payloads – such as LEI origin IDs and cryptographic proof-of-reserves logs – rather than mandating hundreds of blank, institutional swap fields that create severe technological mismatches.

   a. *Who should be the reporting party for a transaction effected on a national securities exchange in an SBS issued by a clearing agency: the national securities exchange or the clearing agency? Who should be the reporting party if an uncleared transaction is effected on a platform: the platform or one of the counterparties?*

To preserve arm's-length execution standards and eliminate duplicate policing, the entity that directly orchestrates the specific lifecycle phase of the trade must act as the sole reporting party. For an SBS executed on a national securities exchange and issued by a clearing agency, the clearinghouse must be the reporting party because it ultimately guarantees the trade, holds central clearing telemetry, and orchestrates the default waterfall model. Conversely, if an uncleared or parametric transaction is executed on a platform, the platform itself – functioning as a code-governed, fiduciary CPO-Matchmaker – must serve as the reporting party rather than the individual counterparties. Under this split-ingestion architecture, the platform automatically streams anonymous transaction data tapes via a Public Subscription Data Feed and utilizes an automated gateway to securely upload client identity packages only during a flagged anomaly, completely bypassing the duplicative data-in-motion compliance tax on retail participants.

3. *To the extent swap and SBS transactions may occur on a blockchain, are amendments to or guidance on the regulations requiring reporting to, and public dissemination by, SDRs and SBSDRs necessary or appropriate? Should the reporting requirements applicable to any swap and SBS transactions that may occur on a blockchain differ from the requirements applicable to swaps and SBS transactions generally? Please explain.*

Yes, amendments and guidance are appropriate to align blockchain-based transactions with cloud-native web protocols, moving away from forcing novel on-chain derivatives into over-engineered institutional swap plumbing. Instead of mandating that platforms continuously package and push bloated, XML-based data streams to centralized government repositories, the reporting requirements for blockchain architectures should utilize a streamlined, split-ingestion "*pull*" model. Under our proposed alternative compliance pathway, the platform natively emits an anonymous execution tape via compressed JSON Schema payloads over a read-only WebSockets connection, allowing SDRs and SBSDRs to tap directly into the public ledger to conduct real-time analysis while keeping sensitive client identities isolated locally in secure compliance databases. By modernizing the rules to support this decentralized framework, the advantages are:

- Full collateralization acts as an absolute circuit-breaker against systemic default
- The CPO Fiduciary Model Exposes This Fraud Faster Than a DCM
- CPO Market Architecture Protections against circular loop

Regulators gain absolute, un-manipulable market transparency and real-time independent ledger verification without imposing immense administrative costs or creating centralized cybersecurity honeypots.

4. *Given the scheduled expiration of the 2019 Compliance Statement in 2029, should the SEC consider amendments to its SBS Reporting Rules to more fully harmonize those rules with the CFTC's swap reporting rules? Please explain.*
   a. *If so, what should be the scope of such amendments? Should the SEC's and CFTC's rules be identical? Are there areas where the SEC's rules should differ? Should the SEC amend its rules to follow the 2019 Compliance Statement? Are there parts of the 2019 Compliance Statement, if codified, that the SEC should not follow? Should the SEC adopt a technical specification for reporting that is identical to the CFTC's technical specification? Are there areas (e.g., asset classes, product types, underlier reporting requirements) where any technical specifications that the SEC may adopt should differ from the CFTC's technical specifications? If the SEC makes changes to more fully harmonize the SEC's SBS Reporting Rules with the CFTC's swap reporting rules, what measures should the Commissions undertake to ensure that reporting rules remain harmonized over time? Please explain.*
   b. *If not, what amendments, if any, should the SEC consider making to its SBS Reporting Rules, and why?*

Given the scheduled expiration of the compliance statement in 2029, the SEC should implement formal amendments to its SBS Reporting Rules to achieve programmatic harmonization with the CFTC, eliminating the highly inefficient

dual reporting pipelines currently taxing FinTech capital. However, the scope of these amendments must NOT result in identical rules that blindly apply over-engineered institutional swap plumbing to novel, zero-credit-risk derivatives. Instead of codifying elements of the 2019 Compliance Statement that maintain institutional data-in-motion strains, the SEC should adopt a technical specification that differs by asset class and product architecture. Specifically, for event contracts that settle against raw operational variables independent of market sentiment, the updated rules must establish an alternative compliance pathway that routes data into a streamlined, single-window telemetry stream under exclusive CFTC jurisdiction, completely cutting out hundreds of blank institutional fields.

To ensure that reporting specifications remain dynamically harmonized over time without violating global regulatory standards, the Commissions must abandon case-by-case exemptions and synchronize their platforms using a shared execution-architecture framework aligned with the global Unique Product Identifier (UPI) standard. Under our proposed model, the technical specification should mandate a split-ingestion reporting architecture where any platform utilizing a 100% pre-funded CPO-Matchmaker structure permanently eliminates traditional valuation messaging and real-time block trade dissemination. The technical specifications should require identical reporting fields only for unique entity identification (LEIs) and cryptographic proof-of-reserves logs to catch circular cash loops and expose algorithmic manipulation. To maintain this synchronization across future market evolutions, the Commissions should utilize the FSOC and the Interagency Risk Committee to jointly manage an "Event Contract Data Bucket" within registered data repositories, ensuring that downstream narrative shifts do not distort the established regulatory perimeter.

Transparency and Data Quality

5. *Are there data elements that are included in the CFTC technical specification that provide limited practical utility relative to the cost or complexity of reporting them? Which ones and why?*

Several data elements in standard CFTC technical specifications provide limited practical utility for prediction markets, introducing extreme operational complexity and engineering costs without adding material consumer protections. Specifically, real-time "*block trade*" dissemination and dynamic valuation or margin messaging – including variation margin, collateral haircut calculations, or floating rate resets – are completely obsolete within a fully collateralized architecture. Because our proposed CPO-Matchmaker model programmatically forbids leverage by requiring 100% of the maximum potential contract payout to be deposited upfront before any wager is matched, default risk is permanently fixed at zero. Forcing a platform to map simple, un-leveraged retail binary contracts into complex institutional data pipelines meant to guard against cascading interbank defaults creates an immense "Data-in-Motion" compliance tax that stifles fintech innovation.

To eliminate this administrative drag, the technical specifications should abandon these multi-tiered institutional swap fields and establish a dedicated "Event Contract Data Bucket" within the existing SDR framework. By shifting data tracking to a lean, identity-and-collateral-focused reporting stack under a modified version of CFTC Rule 4.22, the regulator gains the precise visibility it needs to stop fraudulent wash trading without the crippling compliance costs of standard swap dealers. The technical specifications should replace obsolete margin fields with three targeted reporting metrics: LEIs to expose internal algorithmic trading bots, time-stamped cryptographic proof-of-reserves logs to verify upfront asset pooling, and net versus gross compression audits to track risk accumulations. This streamlined approach slashes total packets transmitted by over 90%, cutting out hundreds of blank fields while providing macro-prudential supervisors with clean, auditable trails to ensure ledger integrity.

6. *Are there categories of reported data elements (e.g., prices, payments, transaction related, etc.) where the data elements included in the CFTC technical specification could be combined or eliminated while maintaining the practical utility of the reported information?*

   Standard transaction-related and payment data categories within the CFTC technical specification should be combined and eliminated under a modified reporting framework for prediction markets to avoid severe operational drag and duplicative data-in-motion strains. Because every contract in our envisaged CPO model is 100% pre-funded and programmatically un-leveraged, complex real-time valuation and margin messaging fields can be completely removed from public trade routing feeds. Instead of forcing platforms to handle hundreds of blank institutional swap fields, transaction data should be combined into a highly compressed, anonymous execution tape containing only four baseline data elements: Timestamp, Contract ID, Execution Price/Premium, and an Execution Token. This transaction category can then be combined with net-risk summary logs via netting cycles run every 1 to 5 minutes, pushing a single Aggregate Compression Summary Log directly into an *event contract bucket* within a registered SDR. Combining transactional tracking into this streamlined architecture slashes total packets transmitted by over 90% while providing regulators with superior, auditable context to verify ledger integrity and detect internal algorithmic manipulation.

7. *Does the SBS public dissemination framework appropriately address large notional transactions? Pursuant to the 2019 Compliance Statement, SBS public dissemination size caps for transactions in large notional amounts follow CFTC protocols, with the exception of transactions in a single credit instrument or a narrow-based index of credit instruments, which are capped at a size of $5 million (e.g., "$5MM+"). Is this the appropriate approach? If not, what would be the appropriate approach?*

   No, the $5 million large notional size cap does not appropriately address prediction market event contracts because it relies on institutional debt metrics rather than tracking the unique capital physics of un-leveraged retail platforms. Imposing rigid, volume-based caps on platforms utilizing a 100% pre-funded CPO-Matchmaker architecture is fundamentally unnecessary because leverage is programmatically impossible and default risk is permanently fixed at zero. Instead of managing risk via arbitrary size limits that disrupt market liquidity and drive trading to offshore venues, the Commissions should adopt a de minimis safe harbor metric that tracks platform-wide open interest or aggregate daily matched volume – such as capping platform activity at a $5 million threshold. Once a platform operates under this alternative de minimis structure, its wagers are entirely backed by upfront escrowed cash, ensuring that no transaction size can trigger an interbank default loop or compromise systemic financial stability.

8. *Do the public dissemination frameworks affect market liquidity, or raise concerns about the public disclosure of the identity of participants in transactions or the trading strategies employed, and if so, how? What steps could be taken to alleviate these market liquidity or disclosure of identity concerns?*

   Standard public dissemination frameworks can severely harm market liquidity and create profound consumer privacy risks by continuously exposing participant identities and proprietary trading strategies to high-frequency predatory insiders. In an open DCM exchange order book, sophisticated algorithmic trading bots exploit real-time data streaming to front-run arriving retail orders and aggressively widen spreads, causing promised "*deep liquidity*" to vanish precisely when hedgers need it most. To alleviate these market liquidity and disclosure concerns, the Commissions should replace continuous data-in-motion transfers with our proposed split-ingestion reporting architecture under a modified version of CFTC Rule 4.22. Under this framework, the platform broadcasts an anonymous transaction tape via a public subscription API to protect privacy, while client LEIs and true retail beneficial ownership records are kept locally in secure compliance databases. Sensitive participant data is never streamed continuously. Instead, regulators utilize an

automated gateway to securely pull identity packages only when automated surveillance nodes detect a true trading anomaly, effectively safeguarding participant privacy and market depth from predatory exploits.

9. *Which publicly disseminated data elements are most useful to market participants for market transparency or other public purposes? Are there any changes to data elements – including those that are already collected but not publicly disseminated and those that could potentially be collected in the future – that would improve the usefulness of the data for price transparency?*

   For prediction markets, the most useful publicly disseminated data elements are basic transaction and pricing components – specifically Timestamp, Contract ID, Execution Price/Premium, and an Execution Token – which provide essential price transparency without introducing server downtime liabilities or data noise. To significantly improve the usefulness of this data for macro-prudential alignment, the Commissions should update technical specifications to include new data elements: the exact percentage of volume driven by internal affiliate bots versus organic retail users, and an encrypted Cryptographic Proof-of-Reserves ledger. Publicly broadcasting this information via a free, open Public Disclosure API transforms the reporting stream into a Self-Auditing Public Safe Harbor, enabling market participants to verify with absolute mathematical certainty that platform liquidity is driven by genuine organic flow and backed by real dollars sitting safely in a regulated bank vault. Crucially, to prevent this transparency from compromising consumer privacy or creating centralized cybersecurity honeypots, sensitive regulatory data elements – such as client LEIs and true retail beneficial ownership information – must be excluded from continuous public dissemination and instead kept localized within secure compliance databases.

10. *Which reported data elements (whether disseminated or not), while conceptually useful, are never or rarely populated in practice, and why? Do they differ for swaps versus SBS? Do data elements that are included in the CFTC technical specification, but are rarely populated, create operational complexities or compliance costs for market participants?*

    Data elements designed for institutional credit default swaps – including dynamic variation margins, collateral haircuts, floating rate resets, and standard mark-to-market data – should not be populated on fully collateralized prediction platforms, or else it would create operational complexities and unnecessary compliance costs. These unpopulated fields differ fundamentally between standard CFTC swaps and SEC SBS because traditional derivatives frameworks are designed to guard against margin default and cascading interbank counterparty failures. However, under our proposed CPO-Matchmaker architecture, leverage is programmatically impossible because the platform requires 100% of the maximum potential contract payout to be deposited upfront before any wager is matched, rendering these mutualized banking risk fields entirely obsolete. Forcing FinTech platforms to build over-engineered transaction-reporting pipelines just to leave hundreds of institutional swap fields permanently blank imposes immense administrative costs on innovation, meaning the Commissions should eliminate these data burdens by acceptance of a streamlined reporting stack focused strictly on unique entity identification, cryptographic proof-of-reserves, and net-risk compression audits.

11. *Are there data elements currently required to be reported pursuant to the swap and SBS data reporting rules that contain information that is duplicative of information obtained through other data elements also required to be reported pursuant to those rules? If so, which data elements and how do they provide the same information?*

    Requiring the collection and reporting of participant occupation and employer data under the proposed CFTC §16.03(g) creates a highly duplicative data-in-motion burden, as this exact relationship information is already thoroughly captured and verified by client-facing brokers during mandatory KYC/AML onboarding checks. Forcing an exchange to independently collect, verify, and maintain these sensitive-employer metrics is completely redundant

because exchanges function strictly as execution venues rather than relationship managers. Furthermore, requiring market participants to maintain dual reporting pipelines under both the CFTC's large trader system and the SEC's tracking framework forces FinTech platforms to burn capital wrapping identical economic events across separate pipelines. To eliminate this duplicative "data-in-motion" compliance tax, the Commissions should authorize an alternative compliance pathway based on our Exposure to Cause versus Effect (E2CvE) model; this framework harmonizes reporting by utilizing a single-window telemetry stream where a platform natively streams an anonymous transaction tape via a public feed, while allowing an automated gateway to securely pull identical, pre-verified participant details only when automated surveillance nodes detect a true trading anomaly.

12. *Are there data elements that, while conceptually useful, are persistently difficult to report consistently across registrants, asset classes, products, or market structures? If so, please identify and explain. What factors most commonly contribute to, and what transaction types (e.g., allocated trades) are most susceptible to, inaccuracies or inconsistencies in swap or SBS data reporting (whether or not related to specific data elements)? Could guidance on or amendments to the swap and SBS data reporting rules resolve such difficulties, inaccuracies, or inconsistencies? Does inaccurate or inconsistent reporting by reporting parties, with respect to publicly disseminated data, affect the utility or value of the information sought by the data element? Are these data elements static, and therefore could potentially be collected in a reference table, or do these elements change over time? With respect to the difficulties, inaccuracies, or inconsistencies described in response to this question, are there practical steps the Commissions could take to improve data quality and transparency without significantly increasing reporting burdens?*

    Yes, data elements linked to multi-tiered, leveraged institutional banking – specifically dynamic variation margins, collateral haircut calculations, and floating rate resets – are persistently difficult to report consistently across modern market structures and are highly susceptible to tracking inaccuracies. In traditional derivative reporting frameworks, these metrics change dynamically over time based on fluid investor sentiment, causing significant data noise, false positives in surveillance tracking, and severe operational mismatches when platforms are forced to map a $1 retail binary option into institutional plumbing. Inaccurate or inconsistent reporting of these dynamic fields severely degrades the utility of publicly disseminated data by generating a volatile "Valuation Mirage" that mimics an equity derivative and invites regulatory duplication. The Commissions can resolve these persistent inaccuracies and improve data quality without increasing reporting burdens by amending their rules to replace these complex fields with static, structure-driven metrics housed in a dedicated "Event Contract Data Bucket". By codifying our 100% pre-funded CPO-Matchmaker architecture, these volatile margin and haircut values are programmatically fixed at zero, allowing platforms to substitute fluid tracking with three clear, static, or reference-ready metrics: Unique Entity Identification (LEIs) to expose algorithmic bots, time-stamped Cryptographic Proof-of-Reserves, and net-risk compression summaries.

13. *Are there changes to reporting deadlines or methods of public dissemination that would improve the usefulness of the data?*

    Yes, moving away from real-time data-in-motion pushing mandates toward a cloud-native, split-ingestion "*pull*" model would significantly improve data utility while protecting consumer privacy and platform operational efficiency. Continuously streaming sensitive regulatory data elements under standard real-time dissemination deadlines is counterproductive, as it fragments liquidity, exposes retail strategies to predatory algorithmic front-running, and transforms centralized data registries into vulnerable cybersecurity honeypots. Instead, the Commissions should adjust public dissemination rules to permit a dual-track timeline: anonymized transaction tape data (comprising Timestamp, Contract ID, Execution Price, and an Execution Token) should be emitted continuously via a read-only

Public Subscription Data Feed for real-time price transparency, while granular participant identity data is kept localized within secure databases. Under this updated framework, tight deadlines for identity dissemination are eliminated; instead, regulators can utilize automated Electronic Blue Sheet (EBS) gateways to pull or summon full account packages only when surveillance nodes flag a true trading anomaly, successfully optimizing data quality while safeguarding the broader plumbing of the financial system.

14. *Currently, each SDR and SBSDR, separately, publicly disseminates information about the transactions reported to it. Does this approach present challenges for price discovery or raise other concerns, or does it present advantages? Please explain.*

Yes, the current approach of having each SDR and SBSDR separately disseminate transaction data presents severe structural challenges for price discovery and macro-prudential alignment by creating fragmented, localized data silos. Forcing direct-access platforms to feed raw records exclusively into disconnected databases generates an "Interoperability Illusion" that leaves macro-prudential supervisors completely blind to cross-border risk concentrations. This fragmented architecture cuts off banking regulators from automated telemetry pipelines, creating a dangerous information gap that undermines the systemic safety mandates of Dodd-Frank Title VIII. To resolve these structural blind spots, the Commissions must abandon separate, duplicative pipelines and establish a unified, single-window telemetry stream under exclusive CFTC jurisdiction. By establishing a dedicated "Event Contract Data Bucket" paired with a modernized Pull-Subscription Market Tape aligned with the global UPI standard, regulators can reconcile platform data quality with systemic safety standards without violating the Major Questions Doctrine.

15. *Should SDRs and SBSDRs take additional steps to validate reported transaction data to ensure accurate and high-quality public dissemination and regulatory reporting, and if so, for what specific data elements? Would such additional validations reduce the costs of addressing data quality issues? What specific additional validations should SDRs and SBSDRs add to ensure higher data quality?*

Yes, SDRs and SBSDRs must implement additional validation steps to protect the central clearing ecosystem from artificial liquidity circulation traps and hidden leverage loops. To ensure accurate, high-quality public dissemination while minimizing the costs of addressing data errors, repositories should replace manual paperwork with automated, technical validations focused on **three specific data elements**: unique entity identifiers (LEIs), cryptographic proof-of-reserves, and portfolio compression histories. First, repositories must execute unique entity identification validations under a modified version of CFTC Rule 4.22 to flag if a single corporate entity or its internal affiliates are executing trades with themselves to manufacture fake volume. Second, they must integrate automated, live-audited proof-of-reserve validations against the NFA WinJammer Portal to verify that Cash in Escrow always matches or exceeds aggregate platform liability, triggering an immediate alert if a platform attempts to create a "Valuation Mirage" using unbacked cash. Third, to prevent portfolio compression from being used as a regulatory eraser to secretly hide internal risk accumulations, repositories must add net versus gross compression audits that explicitly validate the gross notional exposure terminated, the net position remaining, and the specific execution tokens of the participants before any leg is permanently consolidated.

Operational Complexity

16. *Which aspects of the current swap and SBS data reporting frameworks are most operationally complex or difficult to implement, particularly when considering the value of the information reported and the requirements of multiple reporting frameworks?*

The most operationally complex aspects of the current frameworks stem from forcing zero-credit-risk prediction market technology to squeeze into over-engineered DCM-DCO data reporting infrastructure. This creates a technological and operational mismatch when platforms are required to map un-leveraged retail binary contracts into complex SDR and SBSDR fields designed exclusively for leveraged, multi-tiered institutional banking. Specifically, populating dynamic variation margins, collateral haircut calculations, or floating rate resets introduces immense administrative costs and data noise while providing zero practical utility, as these metrics are permanently fixed at zero under a 100% pre-funded matching architecture.

Implementing these dual reporting pipelines becomes persistently difficult because unaligned, disparate data systems force fintech innovators to burn massive capital wrapping identical economic events across separate pipelines just to hit bare-minimum compliance. Shifting raw transaction records exclusively into siloed, separate repository frameworks creates an "*Interoperability Illusion*" and localized data silos that leave macro-prudential supervisors completely blind to cross-border risk concentrations. To resolve this operational complexity, the Commissions should abandon these multi-tiered institutional requirements and establish an alternative compliance data pathway that routes information into a single-window, split-ingestion architecture utilizing a public transaction data tape paired with localized, pull-based identity gateways.

17. *Are there particular validation rules or reporting obligations related to lifecycle events that could be simplified? Are there particular validation rules or reporting obligations related to lifecycle events where the current requirements are appropriate or inappropriate given the value of the information reported? Please explain.*

Lifecycle event reporting, as has been shown by the equities Consolidated Audit Trail project, are subject to errors, including events reported out of sequence. An agentic AI approach eliminates the sequencing issue because it operates from the native data in the system audit trail, which by definition has the proper time sequence of events.

Reporting obligations and validation rules for portfolio compression lifecycle events can be simplified by replacing standard real-time reporting pipes under the **Anti-Masking Rule** with an aggregate netting log. Under the CFTC modified Part 39 and Part 45 frameworks, a compression cycle is only exempt from real-time reporting if there is zero change in net market position between identical counterparties; if it alters the underlying risk profile, it is errantly treated as a brand-new swap, which creates severe data-in-motion drag and strips away individual transaction identities right before potential insolvency.

To resolve this operational gridlock, the current transaction-level requirements should be deemed inappropriate for un-leveraged prediction platforms and simplified through a dedicated "Event Contract Data Bucket". Instead of forcing platforms to handle complex, real-time tracking for every individual leg, the rules should allow a code-governed compression engine to run netting cycles every 1 to 5 minutes and push a single Aggregate Compression Summary Log directly to an SDR. This streamlined validation protocol cuts gross exposure packets by over 90% while explicitly logging the gross notional exposure before compression, the exact net position remaining, and participant identity tokens to ensure financial transparency without increasing compliance burdens.

18. *Should the Commissions consider implementing a materiality or de minimis threshold for the requirement that reporting firms correct errors in data for swaps and SBS, such as for those that have terminated, matured, or are otherwise no longer open? If so, what materiality or de minimis threshold is appropriate?*

There are three main causes of Data Quality problems:

- Self-serving human-induced biases and institutional favoritism
- Poor controls, system glitch, operational resiliency

- Inadvertent or honest mistakes during trade reporting

Putting ALL THE BLAME on investment firms for reporting errors is WRONG. False belief in lifecycle flags to push broker-dealers to implement two-side reporting is an undue burden. It exacerbates SDR and SBSDR unsustainability.

The Commissions should replace blunt trading- volume limits with a risk limit based on the platform's total open interest or daily matched value. Specifically, a platform should be exempt from correcting minor data errors on closed contracts as long as its total active contracts remain under a $5 million threshold. Within a 100% pre-funded CPO-Matchmaker architecture, requiring "*retroactive, data-in-motion corrections*" for expired retail wagers is operationally inappropriate and introduces severe data-processing costs without adding material consumer protection. Because leverage is programmatically impossible and default risk is fixed at zero under this model, closed contracts leave no residual credit exposure, rendering multi-tiered institutional correction pipelines legally and economically obsolete. Instead, the updated rules should establish a permanent **safe harbor** where any closed contract that cleanly logged its gross notional exposure, net position, and participant tokens during its active portfolio compression cycle is exempt from retrospective data audits, keeping the platform's macro risk footprint at net-zero while preventing the creation of vulnerable data-in-motion cybersecurity honeypots.

19. *Should the Commissions integrate machine-readable rule structures or standardized reporting logic, and if so, how? What processes should the Commissions employ to maintain, update, and interpret such rule structures or logic over time? What are the benefits and risks associated with such approaches? What would the costs be, and would those costs be more or less than the costs under the current reporting frameworks?*

The Commissions should integrate standardized reporting logic and machine-readable rule structures, but they must do so by replacing legacy, manual paperwork with rigorous mathematical code audits of underlying smart contracts, liquidation scripts, and oracle price feeds rather than building over-engineered institutional databases. Under our proposed split-ingestion architecture, the reporting logic is natively embedded into cloud-native web protocols where the platform natively emits an anonymous execution tape via compressed JSON Schema payloads over a read-only WebSocket connection. This machine-readable structure slashing platform cloud-hosting costs by an estimated 70-80% and providing a much lighter compliance stack than traditional, bloated swap reporting networks.

The primary benefit is absolute, un-manipulable market transparency that allows regulators to deploy automated surveillance nodes and agentic AI to reconstruct trade sequences, evaluate market-maker alignment, and flag onset signals of manipulation in real time. NOTE: our recommended decentralized Agentic AI approach directly analyzes data at the sources. It addresses the privacy, civil liberties, and cybersecurity concerns of CAT. We urge the Commissions to partner with FSOC and the Interagency Risk Committee to utilize **semantic database**, such as Progress Marklogic and Semaphore for a "*pull-based*" Electronic Blue Sheet (EBS) gateway to pull participant identities only when automated rules flag a true anomaly, safely protecting consumer privacy while minimizing administrative overhead.

20. *Do commenters have suggestions regarding the reporting hierarchies that determine the reporting counterparty? Do commenters have any concerns regarding operational issues related to the reporting hierarchies?*

The traditional reporting hierarchies used to determine the reporting counterparty are incompatible with zero-credit-risk prediction markets, introducing immense operational friction and severe privacy risks. Legacy Dodd-Frank frameworks rely on an institutional precedence structure (Swap Dealer > Major Swap Participant > US Person) designed specifically for OTC intermediated swaps. Attempting to apply these multi-tiered banking hierarchies to retail platforms is a major operational failure; it forces individual retail users making small, un-leveraged wagers to bear complex tracking obligations or forces platforms to act as relationship managers rather than execution venues. This

hierarchy mismatch results in massive data noise, excessive compliance overhead, and the dangerous creation of centralized cybersecurity honeypots packed with sensitive participant data.

Unlike the EU/UK's Multilateral Trading Facility (MTF) model, where MiFID II explicitly permits regulated venues to grant direct electronic access (DEA) to retail participants, provided the exchange architecture handles the consumer suitability natively. The CFTC proposed "Parts 15-18 Routing Approach" for "Direct Retail Clearing Model" *conflated the legal boundaries between clients and counterparties*, which we strongly disagree. To eliminate operational complexity and overcoming prudential regulators' concerns (without abandoning legacy counterparty hierarchies), we recommend amendments to CEA §1a(47)(B), CFTC Parts 4, 38, and 39. It will establish a streamlined reporting structure based on our Fiduciary CPO-Matchmaker Model. Under this framework, the platform itself – functioning as a code-governed, asset-aggregating Commodity Pool Operator – serves as the sole reporting party for all executed contracts, completely removing the reporting burden from individual participants.

By organizing the platform under a Delaware Series LLC structure where every participant account functions as an isolated, 100% pre-funded series cell, the architecture eliminates counterparty credit risk and default loops. Transaction reporting is then simplified into a split-ingestion architecture: the platform emits an anonymous transactional tape via a Public Subscription Data Feed, while securely managing customer identity packages locally to be pulled via an automated gateway only during flagged anomalies.

Standardized Identifiers and Reference Data

21. *What limitations with respect to the information and supervisory or operational utility of the transaction data, if any, arise when the UPI or other standardized product identifiers or classification systems are used?*

We strongly oppose the provision in the CFTC proposal that explicitly permits "contract ticker symbol" be the UIC (Unique Instrument Code) for purposes of part 17 reporting. UIC is NOT the same as UPI (Unique Product Identifier used globally for regulatory OTC derivatives reporting) or ISIN (International Securities Identification Number). It creates an "Interoperability Illusion" and a localized data silo when applied to complex, private corporate indexes.

Under our proposed model, once an instrument is matched on a 100% pre-funded CPO-Matchmaker platform to hedge physical causes, its variable attributes – such as variation margins, collateral haircut calculations, or floating rate resets – are programmatically fixed at zero, meaning they can be completely standardized and captured as static parameters. The technical specifications for these reference data fields should combine transactional tracking into four clear, static, or reference-ready metrics: LEIs to expose internal algorithmic trading bots, time-stamped Cryptographic Proof-of-Reserves logs to verify upfront asset pooling, net-risk summary logs, and UPI standards.

By pairing the global UPI standard with a modernized Pull-Subscription Market Tape, the data architecture cleanly isolates transactional payloads from (Tier 2) sensitive identity infrastructures. This layered approach ensures that unless a contract's payout is explicitly and mathematically dependent on a synthesized capital-market appraisal like a stock ticker, regulators can monitor systemic liquidity and macro risk at the original sources without compromising consumer privacy or generating centralized cybersecurity honeypots. This structured integration slashes total packets transmitted by over 90% while providing macro-prudential supervisors with superior performance – un-manipulable market transparency, circuit-breaker against systemic default, a CPO fiduciary model exposes fraud faster than a DCM, and architecture protections against circular loop.

22. *Are there instances where a data standard other than the UPI should be used to identify products? Please explain.*

No, see our response to Q21 and earlier section about CPO Data Reporting Requirements.

23. *Are there additional opportunities to use standardized and static reference data elements to capture relevant attributes of swaps and SBS? Please explain.*

See our response to Q21 and earlier section about CPO Data Reporting Requirements.

24. *Are there instances where a data standard other than the LEI should be used to identify counterparties? Please explain.*

No, there are no instances where a data standard other than the LEI should be used to identify counterparties, as our framework explicitly supports the mandatory use of a standardized LEI or a platform-verified token mapped directly to an LEI origin ID to maintain absolute ledger integrity. Shifting toward a synchronized LEI data standard is essential to catch the "Valuation Mirage" and provide analytics tracking to flag if a single corporate entity or its internal affiliates are trading with themselves in a circular loop to manufacture fake volume.

To protect retail participant confidentiality and avoid creating a massive government surveillance honeypot like the CAT, these verified client LEIs and beneficial ownership records should NOT be streamed continuously in motion, except for legitimate proxy and investor communication purposes. Instead, they must be kept locally in secure compliance databases by client-facing brokers, allowing the platform's automated engine to instantly map and unroll tokenized transaction paths via an Electronic Blue Sheet (EBS) gateway query only when automated surveillance nodes detect a specific trading anomaly.

25. *Is there information that is currently reported on a trade-by-trade basis that could more efficiently be captured through reference data? If so, please explain the benefits and drawbacks of using such reference data, including: (1) benefits or impacts to public transparency, usability, and accessibility of swap and SBS transaction and pricing data; (2) impediments to accessing reference data; (3) management of changes to the reference data that may occur over time; and (4) costs of maintaining and validating the reference data. In addition to these items, please describe any other risks, benefits, and costs associated with using standardized and static reference data.*

Continuous, trade-by-trade reporting for variable fields is an expensive, highly inefficient, redundant exercise. While we do not object to opportunities where standardized asset directories or master reference tables can be utilized to streamline public transparency, this question rightly identifies a structural limitation: the current framework attempts to shift an over-engineered structured data problem onto reference data as a workaround to bypass the baseline complexities of legacy SDR and SBSDR architectures.

Rather than relying on rigid, narrative-driven databases, the Commissions must adopt an **advanced semantic database** infrastructure, such as Progress Marklogic and Semaphore, to architect true layers of intelligence. For prediction markets, dynamic valuation, margin messaging, and block-trade metrics provide zero practical utility and generate a volatile "Valuation Mirage" when forced into trade-by-trade streams. Because leverage is programmatically impossible and default risk is fixed at zero, under our 100% pre-funded CPO-Matchmaker mode, these fields (e.g., dynamic valuation, margin messaging, and block-trade metrics) should not be populated in the first place.

Instead, the standard reference specifications should look beyond legacy labels and mandate three core, reference-ready structural metrics paired with the global UPI standard: LEIs to expose internal algorithmic trading bots, time-stamped Cryptographic Proof-of-Reserves logs to verify upfront asset pooling, and net-risk summary logs. By routing the financial audit path directly to the National Futures Association (NFA) WinJammer portal, the Commissions can leverage the FSOC and the Interagency Risk Committee to utilize an **advanced semantic database** operating a "*pull-*

based" Electronic Blue Sheet (EBS) gateway to pull participant identities only when automated surveillance rules flag a true anomaly, safely protecting consumer privacy while minimizing administrative overhead.

Implementation Considerations

26. *What factors should inform the appropriate timelines for any such changes, including the sequencing of changes affecting data standards, validation logic, and reference data frameworks of both the CFTC and SEC to minimize implementation risk?*

The appropriate timeline for implementing these reporting changes must be informed by the scheduled 2029 expiration of the SEC's cross-jurisdictional compliance safe harbor. To minimize implementation risk and prevent unaligned systems from forcing FinTechs to burn critical capital wrapping disparate data sets, the Commissions must execute a synchronized, phased sequencing framework managed jointly via the FSOC and Interagency Risk Committee.

Phase one should mandate the alignment of core data standards around identical global frameworks – specifically the UPI and LEI standards – to eliminate localized identifier silos that leave macro-prudential supervisors completely blind to cross-border risk concentrations.

Phase two must synchronize the automated validation logic by codifying an alternative compliance pathway for 100% pre-funded, code-governed CPO-Matchmaker model, allowing platforms to programmatically fix obsolete institutional fields at zero and log net versus gross compression cycles directly into an SDR "Event Contract Data Bucket". Finalizing the sequencing timeline with this split-ingestion approach ensures that high-volume, anonymous transactional tape data is seamlessly migrated to public subscription feeds while (Tier 2) sensitive participant reference data remains securely localized, cutting platform compute costs by an estimated 70–80% without creating centralized cybersecurity honeypots.

27. *How can the Commissions structure implementation to minimize compliance costs and burdens?*

To minimize compliance costs and administrative burdens, the Commissions must abandon case-by-case exemptions and structure implementation around a programmatic, code-governed alternative compliance pathway. The framework should utilize a split-ingestion reporting architecture built on cloud-native web protocols, which allows a platform to natively emit an anonymous execution tape via compressed JSON payloads over a read-only WebSocket connection. This transitions the data framework to a "*pull*" ingestion model would slash platform computing and hosting costs by an estimated 70–80%. Furthermore, by codifying a 100% pre-funded CPO-Matchmaker model where leverage is programmatically impossible and default risk is fixed at zero, the rules can completely eliminate the burden of reporting obsolete institutional swap fields like variation margins or collateral haircuts. Structuring implementation to accept this lean, identity-and-collateral-focused reporting stack slashes total data packets transmitted by over 90%, allowing modern platforms to safely maintain robust market transparency without duplicating pipelines or burning vital capital.